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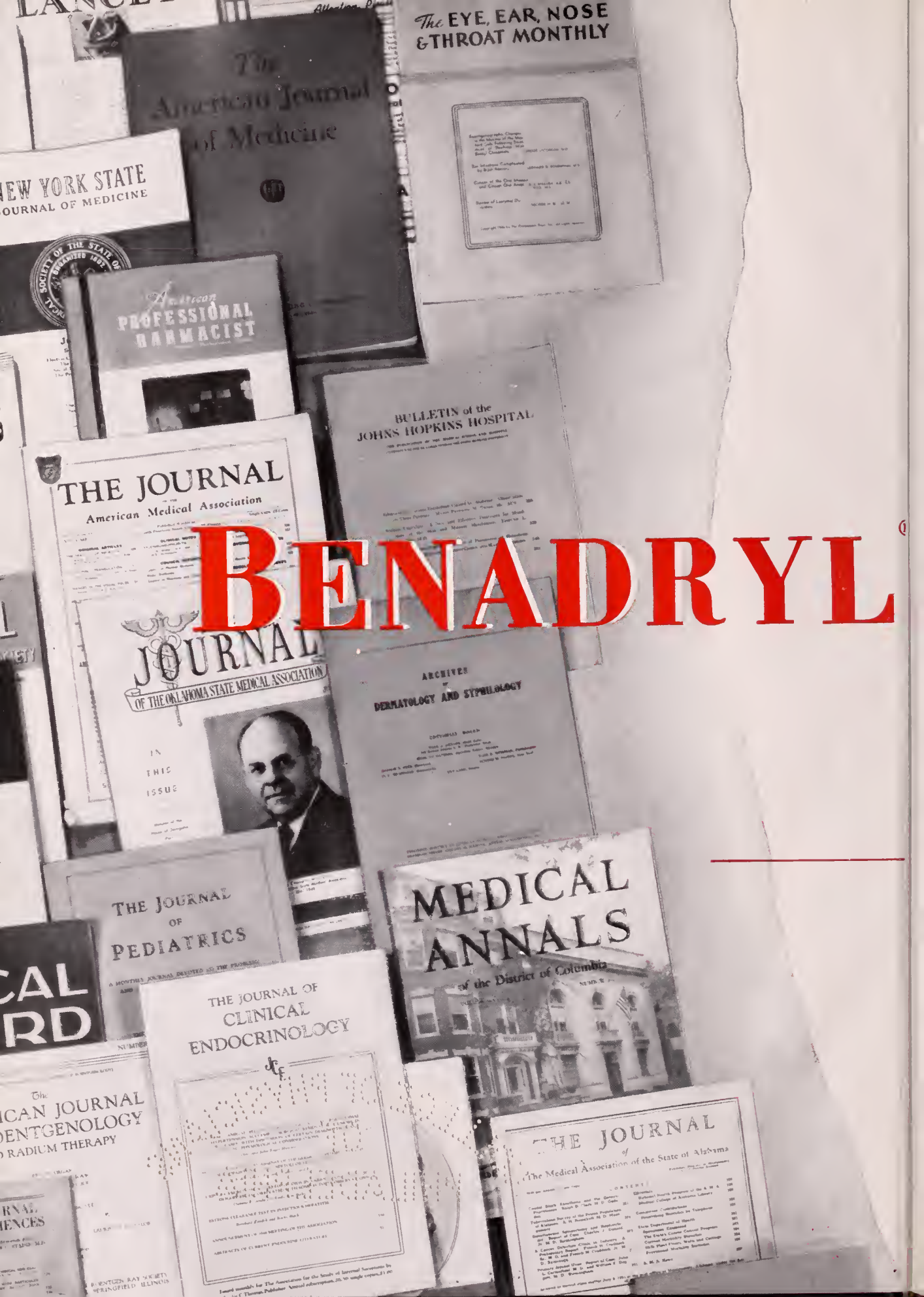
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SOME PRACTICAL CONSIDERATIONS IN THE MANAGEMENT OF ARTHRITIS*

By JOSEPH LEE HOLLANDER, M. D.
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Since the beginning of medical practice, rheumatism and arthritis have been difficult to manage, to the point that Osler was once moved to remark that a doctor should have two doors to his consulting room: one by which the patients could enter and leave, the other by which the physician could make a hurried exit when an arthritis victim appeared. It is no wonder, therefore, that most physicians quickly become discouraged when confronted with the problem of arthritis, or clutch at the straws held out by various drug manufacturers in their glowing reports of new remedies.

The doctor's first responsibility in attacking the problem of arthritis is to establish the proper diagnosis in each patient who complains of joint pain. This statement seems all too obvious to dwell upon, but since there are about one hundred different forms of arthritis, and since many cases referred to the larger clinics and hospitals established for the treatment of arthritis have not been studied thoroughly enough to make a diagnosis, a short discussion of differential diagnosis might be appropriate.

Rheumatoid arthritis, "the great crippler", in its later stages can be diagnosed at a glance. The all too frequent contractures and deformities are obvious. In the early stages the characteristic spindle-shaped swelling of the joints, particularly the proximal interphalangeal joints of the fingers, the metacarpo-phalangeal joints, and the joints of the wrists, elbows, knees, and ankles make diagnosis easy, particularly when the tendency to involvement of symmetrical joints is noted. The joint swelling is not often particularly red or hot unless the process is very acute, but the swelling is soft, and moderately tender. Rheumatoid arthritis is a systemic disease producing anorexia, fever, marked weight loss and muscle wasting. Easy fatiguability may be one of the earliest systemic signs of the disease. One of the characteristics of rheumatoid arthritis which is important to remember in treatment is that particularly in the earlier stages the process consists of a series of spontaneous exacerbations and remissions. The remissions may be partial or complete, and may be temporary or permanent. It is from the occurrence of these spontaneous remissions under one type of therapy or another that so many false hopes for remedies have been raised. From this we must remember also that the disease carries no universally bad prognosis. Actually less than one-fourth of the patients having rheumatoid arthritis go on to the severely deforming or ankylosing stage. Giving a bad prognosis to a patient may do much to lower his morale, already at low ebb from long suffering.

The characteristic changes in the blood of the patient with rheumatoid arthritis are anemia, moderate leukocytosis, occasional eosinophilia, and an increased erythrocyte sedimentation rate. The streptococcal agglutination reaction exhibited by the serum of many of these patients is not constant enough to be a valuable procedure. X-ray diagnosis of rheumatoid arthritis depends upon the finding of osteoporosis of the bone ends at the involved joints, hence the term

*Presented before the Fayette County Medicol Society, at Ook Hill, West Virginia, June 3, 1947.

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"atrophic arthritis". Narrowing of the joint space from absorption of cartilage may be noted, but narrowing may occur also from wearing down of cartilage in degenerative arthritis. The loss of calcium from the bones also may be confused with the bone atrophy from disuse, and the bony changes may not become apparent until the clinical diagnosis is obvious. The x-ray picture, therefore, may be very helpful, but it is not the final criterion in diagnosis.

Rheumatoid arthritis of the spine, which is known under a host of terms, including ankylosing spondylitis and Marie–Strumpell spondylitis, differs from the peripheral rheumatoid arthritis mainly in its predilection for the sacro-iliac joints and the small joints of the spinal column. It begins in the sacro-iliac joints, producing pain and muscle spasm in the lower portion of the back, often accompanied by sciatica. Again, spontaneous remissions and exacerbations of the process are usual. The process may stiffen the back in an ascending fashion, with ankylosis of the entire "poker spine" as the all too frequent end result. Involvement of the spine may accompany, precede, or follow rheumatoid arthritis of the peripheral joints, but in most cases of rheumatoid spondylitis the only peripheral joints involved are those of the shoulders and hips. Here again there may be anemia, leukocytosis, and increased sedimentation rate among the blood findings, but usually the weight loss and systemic manifestations are not as severe. The characteristic physical findings of tenderness over the sacro-iliac joints, marked lumbar muscle spasm, atrophy of the back muscles, and almost complete loss of spinal motion, together with marked reduction of chest expansion, make a clinical diagnosis of rheumatoid arthritis. Here, however, the x-ray is the final criterion. Irregularity, sclerosis and narrowing of the sacro-iliac joint spaces, with complete ankylosis later, similar changes in the apophyseal, or true joints of the spine, and calcification of the intervertebral ligaments, which eventually produce the picture of the so-called "bamboo spine", all confirm the clinical diagnosis.

Under the term "degenerative joint disease", we include those conditions termed osteoarthritis, hypertrophic arthritis, senescent arthritis, menopausal and post-traumatic arthritis. Here the process is essentially the result of wear and tear on a particular joint or a number of joints. Certain hereditary tendencies are exhibited, and perhaps some hormonal factors are involved also, but we can think of the joints as being worn out before their time. Naturally, any old injury to a joint, malformation, or abnormal strain from improper body mechanics will speed up the aging process, and may produce symptoms. The condition is seldom crippling, but may be painful and recurrently distressing. The destruction of cartilage by wear and tear leads to roughening of the joint surfaces, and if all the cartilage is worn off, the underlying bone becomes dense and smooth, taking over the function of the lost cartilage. The eburnation process just described, together with increased bone formation around the edges of the joint, producing spurs or osteophytes, are visible on the x-ray, and have given rise to the term "hypertrophic arthritis". These patients are often overweight, and appear generally healthy. The blood shows no particular anemia, leukocytosis, or increased erythrocyte sedimentation rate. Soft tissue involvement about the joints is minimal, and swelling, except for bony enlargement, is rare.

Gout is a metabolic disease with rather spectacular joint manifestations. Five criteria should make this diagnosis obvious:

1. History of arthritis, occurring in fairly short, acute attacks with complete remissions, most commonly in men over age 35, involving one or only a few joints at a time, and gradually becoming more widespread and chronic through the years. Attacks often precipitated by exposure, dietary indiscretions, trauma, or heavy drinking.

2. Physical findings of acutely swollen, very red and excruciatingly tender joints (often the metatarso-phalangeal joint of the great toe), fever, and perhaps tophi in the ears or near the joints.

3. Laboratory findings of increased serum uric acid, increased sedimentation rate, and leukocytosis, at least during the attack.

4. X-ray findings of punched out areas of negative density along the margins of involved joints. (This may be seen only at a fairly late stage, however.)

5. Therapeutic test with colchicine, given every 3 hours in 1/120 grain doses, to the point of mild diarrhea. This often dramatically terminates a severe attack in from twenty-four to forty-eight hours.

The many other types of arthritis present equally important diagnostic points, but time does not permit discussion of them.

A very frequent complaint is from fibrositis, or so-called "muscular rheumatism." Here, the pain is not accompanied by joint swelling, or other definite physical signs. Weather changes, excessive physical effort, and rest in cramped positions make the patient acutely aware that something is wrong with the muscles and joints. The diag-

nosis is made by exclusion of arthritis and psychoneurosis. These patients experience satisfactory, though temporary, relief from the use of one of the salicylates, or from the application of heat. The prognosis is good, but the condition often is recurrent for many years, never producing more than slight disability.

TREATMENT

Since rheumatoid arthritis is the most disabling of the commoner forms of arthritis, the discussion of management of arthritis will be concerned mainly with this form of joint disease. Many of the general principles of management apply to other forms of joint disease as well.

Treatment of rheumatoid arthritis is based upon the fact that this condition is a systemic disease with prominent joint manifestations. Therefore, treatment is directed not only toward the joints, but also toward the body itself. It is most important that treatment be individualized, and that no set routine be established for all patients. Treatment includes the following measures:

1. Rest. Since we realize that rheumatoid arthritis is a systemic disease, it is important that the patient rest the entire body as well as the joints involved. Rest should be mental as well as physical. The amount of physical rest a patient requires varies considerably and must be determined individually. In a patient with a relatively mild form of the disease, mere moderation of his activities will suffice. In more severe cases, considerably more rest may be required. Since there is danger of producing an invalid reaction and muscular atrophy by too much rest, we try to prescribe optimum amounts. It is most important, even in patients who require a great deal of general rest, to keep the joints moving by regularly scheduled exercises. The purpose of rest is to avoid fatigue, not to immobilize the patient. Reassurance of the patient with as optimistic a prognosis as possible, strong efforts to relieve personal worries and anxiety, entertainment, occupational therapy, and even psychiatric treatment when indicated, all are necessary adjuncts of treatment aimed at mental rest.

2. Diet and general nutrition. Many patients with rheumatoid arthritis are undernourished and underweight. We have noted that a gain in weight often is one of the first signs of improvement. Therefore, a well rounded diet, high in vitamins and minerals, and high in calories if the patient is underweight, is prescribed. Since we cannot be sure of the amount or quality of food eaten or of the absorption or utilization of these foods, we supplement this diet with extra vitamins in the form of multivitamins, brewers' yeast or other measures. We do not subscribe to the claims of certain investigators who give massive doses of vitamins for a so-called specific effect. All efforts to increase the appetite are made when indicated. These include the prescribing of sherry, beer, and whisky at times.

3. Transfusions and hematinic measures. Many of our patients have anemias which we treat specifically with iron, liver, and/or transfusions. At times, transfusions are given even in the absence of anemia, since an apparently nonspecific, beneficial, occasionally dramatic effect sometimes follows such therapy. The reasons for this improvement are not yet understood.

4. Treatment of the infections elsewhere in the body. We do not believe that rheumatoid arthritis often, if ever, is cured by the removal of a so-called focus of infection. Nevertheless, we do feel that any infection is a drain on the body whether rheumatoid arthritis is present or not. Therefore, all obvious infections such as abscessed teeth, acute or chronic sinusitis, tonsillitis, prostatitis, et cetera, are treated specifically.

5. One of the most glaring mistakes made in the usual treatment of rheumatoid arthritis, a mistake which only too often results in crippling deformities, is that the joints themselves are neglected when a so-called specific drug is given to "cure" the disease. We should try to avoid this mistake by keeping in mind at all times the natural course of the disease, particularly the changes in the joints, bones, and muscles. By careful observation and anticipation of events, we often are able to prevent irreversible changes in these structures by the use of physical therapy and orthopedic measures. We know that muscles around diseased joints undergo atrophy, partly due to disuse, but also due to the disease itself. Therefore, heat and massage should be given daily, and active and passive exercises must be done many times a day. Inflamed joints require adequate rest, but complete rest of a joint often results in permanent stiffness; thus, a fine balance between rest and regular exercises must be maintained.

We prescribe various types of heat, including infra-red, diathermy, paraffin baths, heat cradles, therapeutic baths, and contrast baths. Most of these treatments are administered in a physical therapy department. Substitute or supplemental therapy may be employed at home with simple measures.

Most important in our treatment is the anticipation of deformities or their recognition at an early stage. Deformities usually occur in a posi-

tion of flexion. The first signs of such deformities are due to muscle spasm. Therefore, every effort is made to prevent or overcome such spasm. This is accomplished by exercises and massage and by splints, bivalved plaster casts, traction, and various other orthopedic measures. Patients and attendants are admonished to refrain from practices such as placing pillows beneath the knees, since such treatment, while making patients more comfortable, is one of the surest ways to produce a deformity. In the relatively few cases in which permanent deformities develop in spite of vigorous treatment, we call upon the orthopedic surgeons for various operative procedures.

DRUGS

Practically all patients are given salicylates in some form, usually sodium salicylate or aspirin. We do not believe, of course, that such therapy is curative, but we do believe that it is helpful in controlling pain. Rarely does any patient with rheumatoid arthritis require a narcotic. We prescribe regular doses of salicylates in an effort to keep patients below the threshold of pain, so that they will move their joints more freely, and thus prevent deformities.

SO-CALLED "SPECIFIC" THERAPY

The first and perhaps the most interesting of these is the use of chryso-therapy, or gold salts. Much has been written about this, for the main part controversial. Gold therapy in the treatment of rheumatoid arthritis has been known since about 1926, at which time it was accidentally discovered by Forestier. While using gold to treat patients with pulmonary tuberculosis, he noted a rather marked improvement in the joint symptoms of several of the tuberculous patients who also happened to have rheumatoid arthritis. Since that time gold salts have been used in the treatment of rheumatoid arthritis, extensively in Europe and somewhat less extensively in this country, for the past ten or fifteen years. (No case should be treated with gold unless the diagnosis is definite and conservative measures have failed.) Preceding each injection, the patient is checked by means of a blood count, urinalysis, and examination of skin for rash or jaundice. If any abnormality is discovered, the injection is postponed until the toxic reaction is determined to be mild or severe. Only about 60 per cent of cases can go through the course without slight toxicity, but severe complications are rare if precautions are used. "Myochrysine", which is gold sodium thiomalate, and "Solganol B. Oleosum" (aurothioglucose) are drugs of choice. These drugs contain 50 per cent actual gold. The injections are routinely given intramuscularly in the upper outer quadrant of the buttock. In discussing dosage, it must be remembered that all dosages are given in total milligrams of gold salt. Our routine schedule is to begin with 10 mg. of gold salt once weekly for two to three injections, and then increase the amount gradually to 50 mg. once weekly for the period until a total of between 1 Gm. and 1½ Gm. has been given. After a total of 1 Gm. has been given, 25 mg. every 2 or three weeks is continued as a maintenance dose to prevent recurrence. Gold is neither a cure-all nor a specific treatment for rheumatoid arthritis. Therapy with gold salts is of definite value in selected cases in which the diagnosis is definite and in which there is no evidence of renal disease, and no history of drug allergy, severe anemia or other blood dyscrasia. Skin diseases and a history of liver disease are also believed to constitute contraindications to gold therapy. Its use in treatment should be attended with care, and supplemented by physical therapy and other general measures of proved value.

FEVER THERAPY

In treating periarticular fibrositis or rheumatoid arthritis in its early stages, fever therapy by means of intravenous typhoid vaccine injections is worth trying. This is a relatively quick form of treatment, a remission in the disease often occurring within a few weeks after its use. Typhoid vaccine fever therapy is a nonspecific measure, probably acting as a stimulant to the immune mechanism of the body. This therapy is rarely of benefit in late or advanced cases, but seems to give best results in those fairly early cases in which the process seems to be continually smoldering and deriving no benefit from the general or conservative measures. The use of typhoid vaccine fever therapy is contraindicated in elderly individuals, in the presence of cardiovascular renal disease, inactive tuberculosis, rheumatic heart disease, or in those cases in which the patient is extremely emaciated and anemic.

The usual technic for fever therapy with typhoid vaccine is to inject an initial dose of 10 million killed organisms intravenously. The succeeding doses are given every other day, doubling or even tripling the previous dose if the response has been minimal. Each bout of fever is usually preceded by a chill, and may be accompanied by nausea and headache. The side reactions can be controlled by the use of mild sedatives, but salicylates should not be used because of their antipyretic effect. The optimum bout of fever is about 101 to 103 F. continuously for six to eight hours. Higher fevers are unnecessarily debilitating and increase the danger of heat exhaustion

or collapse. A course of six to eight injections, giving a total of 40 or more hours of temperature over 100 F. should be sufficient to produce remission, if the treatment is going to benefit the patient at all. This form of therapy was widely used in the Army Rheumatic Disease Centers, and seemed to improve the patient immeasurably in about 50 per cent of cases. It has been used with considerable success also in treating rheumatoid arthritis of the spine.

ROENTGEN THERAPY IN SPONDYLITIS

The use of x-ray therapy in treating rheumatoid spondylitis, or Marie-Strumpell disease, has been widely publicized in the past few years. While roentgen irradiation has little effect on rheumatoid arthritis in peripheral joints, it seems to result in greatly lessened pain and spasm in the spinal variety of the disease. Remissions follow courses of x-ray therapy in over one-half of the patients so treated.

Our method of treatment, both in the army and in civilian practice, has followed the plan described by Freyberg. The spine, if it is completely involved, is treated through four ports. One port covers the sacro-iliac joints, the second the lumbar spine, the third the dorsal spine up to about D4, and the fourth the upper dorsal and cervical spine. Using a machine with a 200 kilovolt output, with a 50 cm. distance, each port is given 150 to 200 roentgen units (depending on the size of the patient) filtered through 1 mm. of aluminum and ½ mm. of copper. This irradiation can be administered to any two of the four ports on a given day, and the dose is repeated to the alternate ports at two-day intervals, until each area involved has received a total dose of 450 to 600 roentgen units. This course may be repeated in from six to twelve weeks if pain and spasm recur, and again in from six to twelve months if necessary. Female patients should not be treated over the sacro-iliac joints because of the effect on the ovaries. Postural and breathing exercises, and physical therapy should accompany this form of treatment to achieve best results.

THERAPY FOR RELIEVING MUSCLE SPASM

Since the pain and associated muscle spasm of rheumatoid arthritis are often the most distressing features of the disease, considerable effort has been directed toward relieving these symptoms. Heat and gentle massage, or hydrotherapy with underwater exercises, are still the most successful means to achieve this effect, but for patients unable to secure adequate physical therapy several drugs have been recommended. Prostigmine was enthusiastically used for some years, but we have not been able to confirm the good results claimed for it. Other investigators also have expressed their inability to demonstrate muscle relaxation with this drug, which is not surprising, as the pharmacologic action of prostigmine is that of muscle stimulation through its acetylcholine sparing effect at the synapses and myoneural junctions.

More recent reports have recommended the use of intravenous procaine, administered in a solution of 0.1 per cent to the amount of 4 mg. of the drug per kilogram of body weight. This is repeated every forty-eight to seventy-two hours. Our results with this treatment have been disappointing so far, although in osteoarthritis and other conditions there may be some benefit seen.

A treatment of real promise for muscle spasm is the recent use of curare, 1 cc. administered intramuscularly as d-tubocurarine suspended in beeswax and oil. Schlesinger, Ragan, and others at the Columbia Medical Center in New York have reported good initial results in a variety of conditions, including arthritis, in which muscle spasm was prominent. We have used curare as a supplementary treatment in four cases so far, with some success. The dose of tubocurarine may be repeated every two to three days as needed. This is not to be regarded as a substitute for established treatment for arthritis, but as an adjunct in those cases in which muscle spasm is severe and persistent. There are dangers of overdosage to be considered, and much more work is needed to confirm the value of curare therapy.

OTHER DRUGS USED IN RHEUMATOID ARTHRITIS

Many drugs have been recommended for use in treating rheumatoid arthritis. Various combinations of salicylates with iodine, chalmoogra oil, and high dosage preparations of many of the vitamins have risen in popularity only to decline again as the test of time has found them wanting. The recognition of severe and often fatal toxicity from overdosage with vitamin D has greatly reduced the recent demand for Ertron therapy, always highly ballyhooed but never actually proved to be beneficial in arthritis. The sulfonamides, penicillin and streptomycin, all have been hopefully tried, without much, if any, success. Even pyribenzamine and benedryl, the new antihistamine drugs, have been tried with little effect.

We must be skeptical of all new arthritis cures. Any evaluation of benefit must take into account the fluctuations and uncertainties in the course of rheumatoid arthritis, regardless of the treatment used.

The treatment of rheumatoid arthritis, therefore, consists of general measures of proved value, which should be used regardless of the type of drug therapy employed. Emphasis should be placed on adequate rest to prevent fatigue, balanced by adequate exercise to prevent atrophy and deformities, aided by physical therapy, transfusions, adequate diet, and an interested, optimistic attitude by the physician. To this program can be added fever therapy, gold salt therapy, x-ray therapy in spondylitis, and other measures, if and when indicated. A close cooperation between patient, physician, physiotherapist, and orthopedist is necessary.

In treating degenerative joint disease the problem is vastly different. The patient is seldom ill or greatly disabled. The nature of the process makes any actual cure impossible (in this condition the joints are worn out). Briefly, the management should consist of reduction of weight to reduce strain on affected weight-bearing joints, correction of faulty body mechanics, moderation of exercise without drastic curtailment, and symptomatic therapy with salicylates and hormones as indicated. Overrest brings discomfort from stiffness (articular jelling), whereas too much exercise produces aching in the joints (friction effect). These patients should be on the move frequently to keep limber, but prolonged exertion and over-fatigue should be avoided.

Painful Heberden's nodes are improved by reduction of strenuous hand work and the use of contrast baths or warm soaks for the hands. Hot applications to painful joints give adequate, though often temporary, relief. If an osteoarthritic joint becomes acutely painful, the local injection of 1 per cent procaine solution around the painful area is often helpful. Shortwave diathermy treatment is often relieving, whereas in rheumatoid arthritis it is seldom helpful. Gold salt therapy should never be used in this form of joint disease, nor should any drastic form of therapy be attempted. Osteoarthritis of the hip is the exception, and here orthopedic measures are needed.

We need not dwell on the successful use of sulfonamides and penicillin in gonorrheal arthritis, but it should be pointed out that the occasional failure of these drugs in arthritis with gonorrhea, or following it, indicates that the process was not true gonorrheal arthritis, but rather a rheumatoid arthritis precipitated by the gonorrheal infection, and should be treated accordingly. This sequence was frequently observed in the Army Arthritis Centers during the war.

The management of gout has changed but little during the past ten years: colchicine is used in the acute attack as previously described. The low purine diet, avoidance of trauma, and abstinence from use of alcohol are still widely recommended. Intermittent use of salicylates in doses of 15 to 20 grains four times daily for three-day periods at intervals of one to two weeks seems to act as a uric acid diuretic almost as effective as cinchophen, without the dangers of toxicity.

SUMMARY

Proper diagnosis of joint disease must precede the institution of therapy. The general or supportive treatments should be emphasized and never neglected in favor of some so-called "specific" measures. In judging the effectiveness of any form of therapy in arthritis we must take into account the natural course of the disease. Finally, we must admit that although we have no cures for most forms of arthritis, we can do much to lessen the suffering and prevent the disability and deformity that will result if we neglect our patient. We cannot calm the "storm", but we can do much to keep the craft shipshape to ride it out with a minimum of wreckage.

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PSYCHIATRIC CONSIDERATIONS IN THE MANAGEMENT OF TUBERCULOSIS*

WILLIAM B. ROSSMAN, M. D.
Charleston, West Virginia

In any program which embraces the management and treatment of tuberculosis, the need for totality in treatment objectives is imperative. By totality is meant the treatment of the tuberculous patient not only from the aspect of his physical disability or from the aspect of the intrinsic tissue pathology, but also from the standpoint of a human being rendered vulnerable by a serious disease process with resultant exaggerated perplexity regarding his future. Not infrequently has it been said that the patient ill with tuberculosis has a minimum of mental and nervous symptoms. The attitude implied by such an observation has been noted in the literature on tuberculosis throughout past decades. Usually, such reference is made in discussions of the etiology of tuberculosis. Conversely, discussions concerning treatment seldom omit mention of the need that exists for help outside the use of medicines, surgical procedures, and nursing care. In Tice's Practice of Medicine[1] is found advice to the effect that tuberculosis is a chronic disease which has alternating periods of exacerbation and remission and that treatment, moreover, should be directed along diverse lines. In many instances, the personality of the physician himself will determine the success or failure of therapy. Suggestion, persuasion, and encouragement are acknowledged as valuable adjuncts to the whole program of rehabilitation, and the use of occupational-recreational facilities is recommended for dissatisfied patients to spur them on in their quest for health.

Through the years the problem of the psychology of the chronically ill, such as is encountered in the tuberculous patient, always has been recognized but not always has this recognition found its way into the realm of medical therapy. Rather has it been a salient factor, realized but unexpressed, consuming great portions of the physician's therapeutic efforts, but frequently omitted in his case reports and writings.

ETIOLOGY

The classic concepts of the etiology of tuberculosis have been taught as being those of malnutrition, of poverty and poor living conditions, and of exposure to the tubercle bacillus; yet one sees tuberculosis occurring in persons from all strata of society. Some of the victims are exposed to none of the classic etiologic agents; some experience all of them. It is noteworthy also that many of the stricken individuals are young adults, nominally in the prime of life, and actually at the peak of physical vigor. Why, then, does tuberculosis appear? Day[2] suggests that tuberculosis occurs significantly in young adulthood because then is the time of life when emotional stress reaches its peak, when weaning from the family circle must begin, and when the choice of life work must be made. In this period, indeed ,is it possible that the sum of lowered tissue resistance plus massive doses of tubercle bacilli equals active tuberculosis? Or, must one add the element of emotional conflict? Again, is emotional conflict only a catalytic agent, hastening the etiologic processes to completion? Further studies of the effect of emotional conflict on the etiology of tuberculosis obviously are needed, but until more evidence is available prudence demands that the influence of emotional conflict be carefully assayed in the total etiologic conception.

Clinical experience indicates that emotional conflict contributes to the development and subsequent course of tuberculosis. For example, any physician seeing hospitalized tuberculous patients over a long period of time recognizes the myriad of personality reactions which they exhibit. From the very beginning of the illness to its final outcome, the physician sees his patients in the painful task of constant adjustment to the unknown quantity of their disease. Strecker[3] and his associates report that, in their experience, the reactions of patients to the disease are diverse and can not be easily classified. Among the reactions seen in a group of 2,000 tuberculous patients studied are variables ranging from the religious acceptance of the illness as being an act of the Supreme Being to the contemplation of suicide and the elaboration of plans for performing such an act. Irritability,fatalism, bitterness, frustration, even euphoria, are reactions often noted. Rarely does the individual fail to show some outward emotional expression toward his disease. Strecker and has group find that attitudes change with continuing hospitalization. Optimism is replaced by pessimism, euphoria by depression. Anxiety and apprehension are uniformly present. Patients begin to feel that their friends and families will shun them, that the community will not understand their disease, and that jobs will not be open to them should they recover.

CASE REPORTS

To illustrate the effect of emotional conflict on the development and course of tuberculosis, the following case report is cited:

Vera was a 22 year old woman who was employed as a saleslady. When fiirst seen in consul-

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tation a note from her family physician offered this pertinent information: "For the past six months Vera has been tired; during this period she has lost approximately 10 pounds. She hasn't been able to sleep well and has lost her appetitie. She told me that she has a vague feeling of uneasiness and tension. My physical examination showed nothing, but her chest x-ray showed a linear and nodose infiltration of the right upper lung which was diagnosed as pulmonary tuberculosis, minimal, fibroexudative in character. Her sedimentation rate was 15 millimeters for the first hour and 26 millimeters for the second hour. Please see her in regard to this nervous tension."

Vera's outstanding complaint was a feeling of tension, but she had noticed also increasing inability to concentrate and an "inner compulsion" to accomplish "something worth-while." These symptoms were not new ones for her because they had been present a year previously when she had left home abruptly to seek employment in the city. Despite her success in finding work and her apparent adjustment to new living conditions, she had continued to feel tense, miserable and unhappy. As she expressed it, a deep conviction of guilt existed.

Six months previously (roughly, at the time her symptoms became most bothersome) she had met a girl whom she had invited to share her apartment. Shortly afterwards friction had developed between the two because the new roommate was an aggressive and dominating type of person. The friction culminated in eventual separation of the pair and Vera's return home.

Upon her return home, Vera found her mother hostile towards her for leaving home; her father seemed preoccupied with his business, which was usual. These family attitudes were added, then, to her own physical symptoms of fatigue and uneasiness until the pressure became so great that she sought medical advice.

After a diagnosis of tuberculosis was made, a treatment routine was suggested which included rest, proper nourishment and periodic clinical follow-up. Vera tried ardently to follow these simple rules since she felt an "inner need" to do something as atonement for the wrong she had done her family. But this compulsion to accomplish eventually prevented her from resting, kept her constantly on the move, and urged her to work each day in her father's store as "payment" for her wrongdoing.

During six months of observation Vera's condition became worse clinically and serial roentgenograms showed definite progression of the chest lesion. Finally, arrangements had to be made for her transfer to a hospital. She has remained a hospital patient since April 1947.

When first seen in consultation this patient had an organic lesion which offered a hopeful prognosis. Actually, the coexistent emotional illness prevented full utilization of proper therapeutic measures and contributed to the advance rather than to the arrest of the disease. Although removal of the patient from the source of much irritation and conflict was necessary, psychiatric treatment should be continued until the patient realizes the significance of her emotional patterns.

Even during the acute phase of a tuberculous illness emotional reactions may dominate the clinical scene and interfere with therapy. This is shown clearly in the following case:

Dorothy* was 26 years old and worked as a stenographer. She was seen in consultation at the height of her disease. She was acutely ill with a tuberculous pneumonia and was profoundly depressed. Her emotional reaction was so pronounced that a presumptive diagnosis of a psychosis secondary to pulmonary tuberculosis was entertained.

From contacts with Dorothy it was learned that she had been sick only three weeks prior to her hospitalization. Beginning with an ordinary chest cold, she experienced in rapid order profound fatigue, a persistent hacking cough with copious production of sputum, night sweats, and loss of appetite. She was advised to enter the hospital for a study. Her condition became worse and she had to be given streptomycin. All through the process of hospital study she had wondered what might be her trouble. When she learned, finally, that she had tuberculosis, she almost immediately became hostile towards everyone. Instead of her usual vivacity, she displayed reticence. Belligerancy, testiness, and self-depreciation colored her emotional reactions.

While there still was evidence of toxicity, temperature elevation, and serious constitutional reaction, psychotherapy was begun. Efforts were directed along the line of offering help medically, of listening to her expressed fears and doubts, of encouraging her to plan for the future, and of reassuring her that her disease and her plight were understood and appreciated. To these simple gestures she responded gradually and when the time came for suggesting transfer to a tuberculosis hospital, she was willing to go and to remain until released.

It is quite possible that suicide was considered as a solution to the dilemma that confronted

*Seen through the courtesy of Dr. Willard Pushkin.

Dorothy. Prompt and tactful recognition of the emotional components of her illness yielded results which were heartily encouraging, and this type of handling can be done by every worker in the tuberculosis field.

TREATMENT

As stated previously, totality in treatment objectives is imperative if one wishes to attack the tuberculosis problem scientifically and comprehensively. The physician, the nurse, and the trained field worker need a practical understanding of the emotional attitudes of their patients so that help can be administered early, adequately, and effectively in cases in which emotional conflict threatens the orderly progress of the disease to a favorable arrest. To ignore emotional factors is to close one's eyes to comprehensive treatment and to close the door to scientific progress.

As Knapp[4] points out, psychotherapy for the tuberculous patient should begin at the time the diagnosis is made and should continue in force during and after the period of hospitalization. Knapp further believes that all persons who are concerned with the care and treatment of the tuberculous should be conversant with psychotherapeutic methods by means of which they can deal properly with the needs of their patients. In many instances, it is just such measures applied early and continued throughout the entire course of the disease which enable the individual patient to make progress and to realize that his future is not necessarily dismal and devoid of hope. Since the patient sick with tuberculosis is also a patient sick with uncertainty and conflicting emotional forces, those who endeavor to help must understand the intimate relationship of mind and body and must evaluate equally the influences of organic pathology and psychopathology.

Most workers admit a willingness to use proper psychiatric methods in dealing with the emotionally disturbed tuberculous patient, but frequently ask: "What is acceptable psychiatric management?" Or, they may express themselves thus: "If I had the advantage of more knowledge about emotional reactions, I'd feel better about the things I try to do with my patients." The solution to these problems can be found in the realization by the worker that emotional conflicts are uncovered rapidly when the patient feels that someone is interested in him as a person. Emotional conflicts, on the other hand, are apt to remain buried or elusive if the patient feels that his is just another case with a different number! A simple willingness to understand the patient usually will suffice to bring out his fears and uncertainties, his concern about the future, his frustrations and disappointments. To the tuberculous patient the chance to share his feelings with someone who is in a position to help means to him the survival of faith in his fellow man and rebirth of hope for the future.

There is a real challenge to psychiatry in the coming years to contribute materially to the improvement of treatment for the tuberculous. To do this, there must be close coordination of effort between individuals and agencies dealing with tuberculosis and mental hygiene. With the appearance of national interest in the mental hygiene movement, and its sponsorship through federal and state appropriations, the means now are available for the formation of a unified program of medical, psychiatric and sociologic treatment of the patient with tuberculosis. Within the foreseeable future it will be possible to provide all of the branches of medicine with adequate psychiatric consultation and substantial treatment facilities to implement a well rounded program for public health.

SUMMARY

The problem of the psychology of the chronically ill individual, as it exists in the tuberculous patient, is discussed. Etiologic concepts of tuberculosis should be revised to include a consideration of the role that emotional conflict plays in the development of the disease.

Two illustrative case reports are cited, showing the effect of emotional conflict on the progress of tuberculosis.

Psychotherapy for the tuberculous patient includes the adoption by the worker of an attitude of interest and understanding. Helping the patient to share his emotional experiences is a most important psychologic step.

The need for a unified program of medical, psychiatric and sociologic treatment of tuberculosis is stressed.

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I like to see a man proud of the place in which he lives. I like to see a man live so that his place will be proud of him.—Abraham Lincoln.

TUBERCULOSIS DIAGNOSTIC SERVICES IN WEST VIRGINIA*

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Due to the lack of trained personnel, which was particularly acute during the war years, tuberculosis diagnostic facilities throughout West Virginia were not developed to a degree needed to serve the state properly. Since the ending of the war, a larger body of personnel has become available and necessary equipment is being released. Accordingly, an effort is being made to expand present chest diagnostic facilities to serve more regularly all areas of the state. Only limited funds are available for this: the $10 thousand field clinic appropriation granted the Bureau of Tuberculosis Control by the legislature, and the funds budgeted for case-finding by county tuberculosis associations.

Distribution of the $10 thousand appropriation was determined by four factors:

1. The continuation of clinics now established and functioning which were (and currently are) dependent upon support through the field clinic appropriation.
2. The desirability of getting clinics established in the industrial population centers in which tuberculosis incidence is known to be highest.
3. The desirability of location in relationship to shopping and business centers and multiple travel routes serving large territories.
4. The amount of tuberculosis association funds available in the various localities for assistance in the project.

To accomplish this it was decided that the appropriation be used to pay fees of clinicians and technicians exclusively, and that their services be allotted according to the aforementioned considerations. Expenses of travel incurred by clinicians and technicians, and the cost of films, their processing, interpretation and handling, et cetera, are to be charged against the county tuberculosis association, as has been customary. In this way, service can be made available everywhere and concentrated where most urgently needed.

As these clinics are not inexpensive, it was decided to recommend that an x-ray fee of two dollars, or any part thereof, be charged all persons able and willing to pay. In this manner more persons unable to pay could be taken care of throughout the year.

The types of clinics, x-ray and diagnostic, were determined upon, a requirement due both to expense and a shortage of trained tuberculosis specialists. These are being carried out as follows:

X-Ray Clinics.—Such clinics are for "screening" patients and "feeding" properly selected cases to the diagnostic clinics. They are planned and scheduled to cover territories distant from diagnostic centers in order to preclude individuals from making long trips unnecessarily and to eliminate those not needing special study and consultation. A technician with portable 14 x 17 inch x-ray equipment, a nurse, and a few volunteer workers constitute sufficient personnel to handle the clinic. Children with negative tuberculin tests and apparently well persons with no specific indication of need are not recommended for x-raying. At these clinics, persons indicating need of sputum studies may be given containers and instructions, and tuberculin testing may be done if indicated. Films will be sent to the clinician serving the area for interpretation, and from them he will select the individuals to be brought to the diagnostic clinics for further study and consultation.

Diagnostic Clinics.—These clinics are for the purpose of confirming or establishing a diagnosis from previous x-ray studies or laboratory findings, of continual observation of suspected and known cases by clinicians, of consultation service for private physicians, and of patient-specialist consultation. The clinician is in charge of the clinic and will be assisted by at least one nurse and volunteer workers from the tuberculosis association. Portable x-ray equipment will be available. As indicated, patients selected will be those with symptoms and positive x-ray findings or those who are referred by private physicians. As a clinician can efficiently examine and consult with only a limited number of patients, and as the x-ray capacity is from 75 to 100 films per clinic, the clinics can be used also for "screening" purposes for other classes of patients.

With these two types of clinics scheduled and operating throughout the state, mobile units using 70 mm. film and having a 750 per day capacity will be used strictly for studying special groups such as industrial employees, food handlers, or school personnel, or for complete community surveys.

Recommendations governing the planning and management of the clinics are as follows:

A. Patients coming to the clinic will be classi- into six groups:

*Plan inaugurated July 1, 1947.

1. Suspects: patients with symptoms or those referred by their physicians for cause.
2. Cases: known cases under home supervision (including ex-patients of sanatoria).
3. Contacts: those brought in only because of known contact (not included are those in other groups discovered to have had contact).
4. Occupational: those brought in for routine check because of occupation, e. g., food handlers, teachers.
5. Survey Follow-up: cases brought in because of suspicious findings on miniature film and requiring further investigation.
6. Positive Reactors: those found to be positive during tuberculin survey for sampling (usually below age 21).
7. Other.

B. Routine:

Group	Clin. Exam.	Tuberculin	Sputum	X-ray
(1)	yes	(a)	(b)	yes
(2)	yes	no	yes (c)	yes
(3)	no (d)	(e)	no (f)	(e)
(4)	no (d)	(e)	no (f)	(e)
(5)	yes	(a)	yes (b)	yes
(6)	no (d)	no	yes (b)	yes
(7)	(g)	(g)	(g)	(g)

(a) Ideally, patients should be referred by physicians without having had a previous postive test. Practically, tests should be done at clinic if x-ray and clinical examination show reasonable doubt that condition is tuberculous. Routine tuberculin test at the clinic is probably unnecessary and may be inadvisable because of danger of severe reactions.

(b) Sputum should be examined if patient is expectorating.

(c) As in (b). If patient has no sputum, gastric lavage should be done if possible, and culture made.

(d) No examination is necessary unless patient has symptoms.

(e) Need not be x-rayed unless positive reactor. If tuberculin test has been negative, repetition of test is all that is required unless or until it becomes positive.

(f) Not unless clinically suspicious of tuberculosis, and a positive reactor.

(g) Depends on clinician's judgment.

C. Tuberculin tests on groups 3 and 4, and x-rays, if necessary, may be done prior to attending clinic and the patient need not attend clinic unless he has symptoms which, in the nurse's judgment, make such attendance advisable.

For the fiirst six months, 129 clinics have been scheduled. (Excluded from this count are the daily services provided under different plans in Cabell and Raleigh Counties.) Although allocations from the appropriation have been set aside for service to Berkeley, Greenbrier, Jefferson, McDowell, Mercer, Mingo, Monroe, Morgan, Pocahontas and Wood Counties, no clinics have yet been scheduled. In most of these territories, local groups are currently working to establish regular monthly service as soon as possible.

Eight counties are now conducting regular diagnostic clinics, at least monthly, with tuberculosis specialists as clinicians. Three counties are conducting x-ray clinics regularly. Seven counties are planning quarterly diagnostic clinics and the remaining counties are to be serviced by occasional clinics, diagnostic or otherwise.

These clinics, it is hoped, can be used in an overlapping manner between counties. In many instances, clinics, by necessity, will be months apart in certain counties. It is part of the general plan and schedule, therefore, to encourage the crossing of county lines in cases of patients requiring immediate or emergency service. However, to prevent overcrowding at clinics, it is being suggested that appointments be made for out-of-county patients with those responsible for conducting the clinics.

As county associations become able to finance completely their own services, they will be encouraged to withdraw from participation in the field clinic appropriation, thereby freeing these funds for use in expanding services to areas in which financial resources of local tuberculosis associations are more limited.

DEAFNESS IN YOUNG CHILDREN

Deafness in young children is never an obvious defect, though it may seriously retard the development of speech and intellect. Consequently the true cause of backwardness in a deaf child may not always be appreciated during the earliest formative years, even though a child be almost totally deaf.

When the deafness though severe is not complete a child may respond to loud sounds of everyday life while being deaf to speech. In such a case any backwardness in speech and intellectual development may be attributed to causes other than deafness, and remedial measures employed that are both inappropriate and ineffectual. Thus the importance of early ascertainment of the nature and extent of the deformity handicapping a child with defective hearing cannot be overemphasized.—British Medical Journal.

RENAL PAPILLARY NECROSIS COMPLICATING DIABETES MELLITUS

(A Review of the Literature with Case Report)

By RICHARD J. STEVENS M. D., S. WERTHAMMER, M. D. and JOHN S. PEARSON, M. D., Huntington, W. Va.

Necrosis of the papillae of the renal medulla is a rare pathologic condition. It was first described in 1877 by Friedrich[1] and reports of only 60 cases are found in the literature. The purpose of this paper is to report an additional case of papillary necrosis, and to discuss its etiology and its relationship to diabetes mellitus.

PATHOGENESIS

Papillary necrosis occurs exclusively as a complication of pyelonephritis. Although several hypotheses have been advanced, the pathogenesis remains unsettled. Friedrich,[1] in his original description, considered that the necrosis was due to pressure ischemia associated with urinary obstruction. His case was said to have hydronephrosis. Orth[2] named the condition "nephritis papillaris bacterica" and considered the necrosis due to a hematogenous bacterial pyelonephritis. Chiari (quoted by Gunther[16]) considered it to be due to obstruction per se, but Gunther, in reviewing Chiari's cases, found evidence of pyelonephritis in addition to obstruction. Kaufmann,[6] Gruber,[13] and Putschar[14] thought that the lesion was caused by obstruction and ascending infection. Schomer[10] felt it to be due to capillary thrombosis. Foulon and Busser[12] postulated pyelovenous backflow of purulent urine. Gunther,[16] and Mellgren and Redell[28] considered the necrosis to be due to bacterial toxins. Experimentally, Leviditi[3] produced palillary necrosis in animals by the intravenous injection of vinylamin. Rehns,[4] using tetrahydroquinoline, and Oka,[5] using bromethylaminbromhydrate, produced similar results. Mallory, Crane and Edwards[26] were able to produce necrotizing papillitis in normal rabbits by ligation of one ureter followed by the intravenous injection of pathogenic organisms; the lesions appeared only in the obstructed kidney.

SYMPTOMATOLOGY

A clear-cut symptom complex has not been established, and it is most revealing that in only one of the 60 cases recorded was the diagnosis even suspected prior to the actual examination of the kidney. All of the cases present the symptoms and clinical findings of acute pyelonephritis. Sheelan's[17] case was that of an 18 year old primipara admitted for delivery. She had shown a "pyelitis of pregnancy" for several days prior to admission and died seventeen days postpartum with fever, pyuria, oliguria and uremia. Robbins, Mallory and Kinney[32] presented 26 cases, 19 of which occurred in patients with diabetes. They divided their cases into two clinical categories: (1) an "acute fulminating" group, characterized by sudden onset of symptoms suggesting a severe generalized systemic infection followed by a rapidly fatal course with prostration, septic fever, rapid pulse and leukocytosis, pyuria, oliguria and azotemia invariably being present, and (2) a "subacute protracted" group, characterized by a period of weeks or months of purulent pyelonephritis with a terminal exacerbation resembling the acute fulminating type. Mellgren and Redell[28] described colic similar to that of ureterolithiasis. They explained the pain on the basis of obstruction of the ureter by a sloughed papilla, which Kaulmann[6] had described previously. Alken,[20] in his four cases, reported retrograde pyelograms and described a cavity-like enlargement and deformity of the calyces similar to that seen in tuberculosis.

RELATION TO DIABETES

Although Orth[2] considered papillary necrosis a complication of diabetes, it was not until Gunther's[16] review in 1937 that the relationship was emphasized. Baldwin and Root[27] demonstrated that 20 per cent of patients dying from diabetes mellitus have infection of the kidneys. Harrison and Bailey[29] emphasized the importance of urinary tract infections in diabetes. They compared a group of 50 unselected nondiabetics with 50 diabetics and found bacteria present in the urine of 27 of the diabetic patients and in only 4 of those not suffering from diabetes. Furthermore, 10 of the persons with diabetes showed pyuria which was usually asymptomatic, while only 2 of the patients in the other group had pyuria. They presented 3 cases of what they called "necrotizing pyelonephritis" in diabetic patients. Of these, two died, extensive pyelonephritis with abscess formation and necrosis being shown. The third patient recovered after undergoing nephrectomy on the left side; the kidney showed nodular areas of scarring which these observers considered to be the end result of necrosis. It is not clear whether or not the necrosis in these cases was papillary.

Gunther[16] credits Froboese with suggesting the connection between diabetes and necrotizing papillitis. The former reviewed 58 autopsy records of persons who had died from pyelonephritis and found 7 cases of papillary necrosis, 5 of which were in diabetic patients. He reviewed, also, 65 kidneys surgically removed because of pyelonephritis, 3 of which showed papillary necrosis. These three kidneys were from diabetic patients, the necrosis being out of all proportion

to the degree of inflammation in the urinary tract. In Gunther's opinion the papillary necrosis is due to the effect of bacterial toxin, and the extent of necrosis may be due to the large number of bacteria present. He regards the relatively poor blood supply of the papillae as a predisposing factor.

Robbins, et al,[32] quote autopsy figures showing urinary tract infection in 6.7 per cent of all persons with diabetes. From 1932 to 1945 they found at autopsy 26 cases of necrotizing papillitis, of which 19 cases occurred in diabetic patients and 7 in persons not so afflicted. These cases were found among approximately 10,000 autopsies, of which 400, more or less, had been performed on diabetic patients. None of the 19 patients referred to (12 female and 7 male) presented any signs or symptoms of urinary tract obstruction, whereas 6 of the 7 non-diabetic patients mentioned (all male) showed obstruction due to prostatic hypertrophy. These observers feel that papillary ischemia is important in the etiology of the process.

An occasional diabetic patient is encountered in whom, in spite of apparently adequate insulin therapy and dietary control, fatal coma develops. This condition, in some of these patients, undoubtedly is associated with kidney infection as shown by pyuria and albuminuria. The coma may be due to uremia rather than to the diabetes per se. Therefore, evidence of azotemia or renal infection should be sought in such cases. No pathologic specimen showing healed papillary necrosis has been described. It is possible, however, that in some cases of uncontrolled diabetes with pyuria, albuminuria, azotemia and coma, papillary necrosis is present and that the lesion may heal with recovery of the patient. The fact that recovery took place in some of the reported cases in which one kidney with papillary necrosis was removed supports this possibility, inasmuch as the disease may have been bilateral.

Mellgren and Redell[28] described, in the medulla of the kidneys from 2 persons with papillary necrosis, a deposition of atypical amyloid which they called "paramyloid", after Lubarsch.[9] They state that this material frequently is found in the pancreas and kidneys of diabetic patients; it is located in the interstitium, especially around the blood vessels. They believe that it may interfere with the blood supply and predispose to devitalization, and hence, may be the main predisposing factor of papillary necrosis in diabetes. They believe, with Kaufmann,[6] that infection is present in every case. They find that in the nondiabetic case there is an overwhelming infection of the entire urinary tract (cystoureteropyelonephritis), whereas, in the diabetic case, the infection may be slight and may be localized in the kidney medulla.

CASE REPORT

Miss L. M., an 82 year old white female, was admitted to St. Mary's Hospital, February 6, 1946. At the time of a previous admission, April 23, 1930, the diagnosis was probable infectious hepatitis. No sugar was found in the patient's urine at that time. Fourteen years later she was discovered to have diabetes mellitus and was started on protamine zinc insulin.

She was first seen by one of us (R. J. S.) in June, 1943. She had taken no insulin the previous nine months. At this time, she was suffering from an infected right fifth toe which was successfully treated with wet dressings. The heart and lungs were normal. Her blood pressure was 120 systolic and 70 diastolic. The liver edge was palpable one fingerbreadth below the costal margin on the right. The spleen was not felt. There were varicose veins of both lower legs. The patellar reflexes were not elicited. There was no temperature elevation. Urinalysis showed sugar (4 plus), and the fasting blood sugar was 272 milligrams per hundred cubic centimeters. The hospital course was uneventful except for generalized pruritus which developed after admission. At the time of discharge the diabetes was controlled by 15 units of protamine zinc insulin given each morning.

She continued to have exacerbations of pruritis and was again hospitalized in January 1944. Globin insulin was given at this time without benefit. She was skin tested for numerous allergens and showed strongly positive reactions to all soaps. She was placed on soap substitutes with some relief. Her urine and blood sugar on this admission were within normal limits.

In May, 1944, she complained of dysuria and her urine showed albumin (1 plus) and many pus cells. Following the administration of sulfadiazine the urine became normal. The patient became lax in taking insulin and in September 1944, was rehospitalized suffering from a gangrenous right fourth toe which sloughed off. Catheterized urine specimens on this admission showed the presence of pus cells on all examinations. The administration of penicillin was followed by a severe erythematous rash which subsided after the drug was discontinued. In January, 1946, she was hospitalized for the removal of a cataract. Her pruritis was very severe during this hospital stay, and she returned to the hospital on this account. The pruritis and asso-

ciated rash failed to respond to various measures, including benadryl. The urine showed albumin (1 to 3 plus) and contained clumps of pus cells on all examinations. Because of incontinence, an indwelling catheter was used during the latter part of this hospital stay. She became confused and stuporous and on March 26, 1946, hemiplegia developed on the left side. She subsequently became comatose, and on March 29th parotitis appeared on the left side. She died April 4, 1946. Unfortunately, since the condition of the patient was deemed hopeless, no laboratory examinations to determine the type of coma were made.

AUTOPSY FINDINGS

The important findings at autopsy were in the lungs, pancreas, and urinary tract. Examination of the head was not permitted.

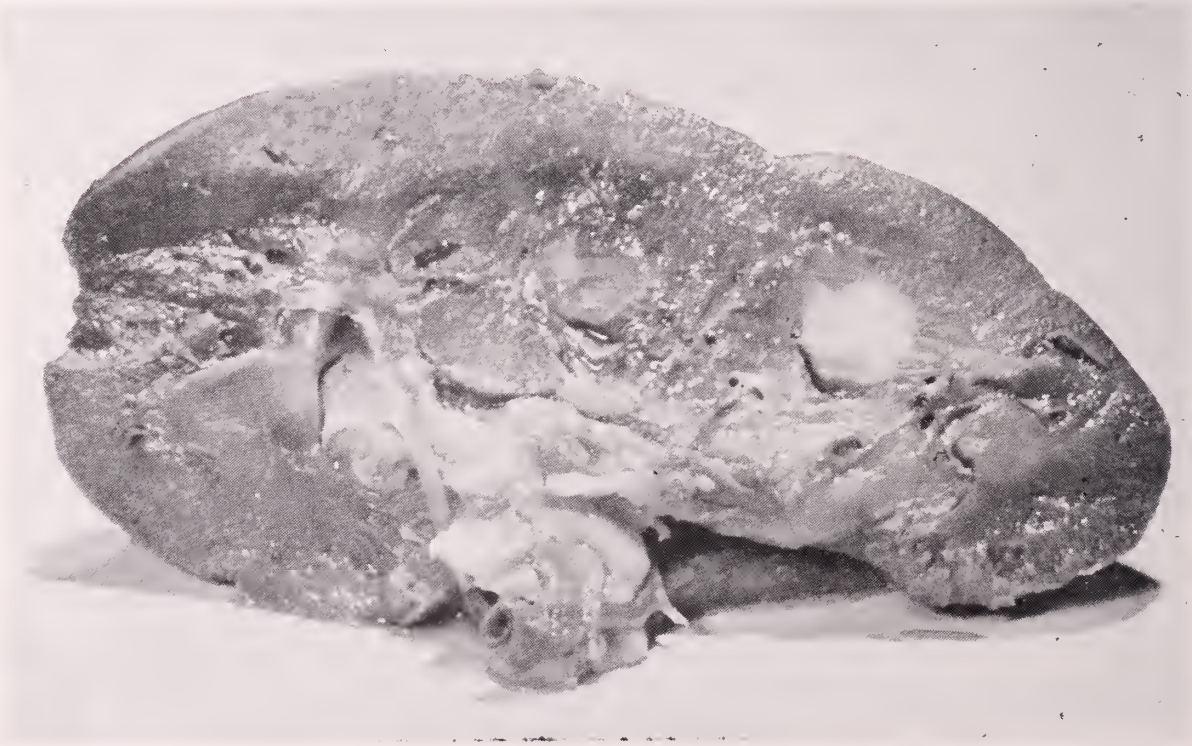
There were small areas of consolidation scattered throughout both lower lobes of the lungs. On gross examination, the pancreas appeared normal but microscopically, partial or complete hyalinization of many islands of Langerhans was seen.

The kidneys were slightly enlarged, each measuring 13 x 7 x 6.5 centimeters and weighing together 295 grams. The capsules stripped with ease, disclosing a smooth and reddened surface. On incising, the pelvises were seen to be filled with creamy pus. The pelvic mucosa was only slightly reddened, as were the mucous membranes of the ureters and the urinary bladder. Many papillae and the adjacent areas of the medullary pyramids were converted into dry, friable, yellowish masses with well-defined serrated margins near the corticomedullary junctions. The margin of the necrosis was outlined by a hemorrhagic and purulent halo (see cut).

Microscopic sections showed many necrotic papillae; in some, the tip had been sloughed off. The necrosis was of the ischemic type with absence of nuclear stain and ghost-like preservation of the structures. In the necrotic areas small thrombosed blood vessels were seen. The border of the necrosis showed a seam of polymorphonuclear leukocytes and red blood cells. Moderate numbers of chronic inflammatory cells were found in the remaining kidney parenchyma. There was no paramyloid in the interstitium. Gram stains showed numerous gram-negative rods around the necrotic areas, and smears of the pelvic pus revealed the same organisms.

DISCUSSION

The case evidently falls into the "subacute protracted" category of Robbins, et al.[32] As in other reported cases, the finding of papillary necrosis at autopsy was not anticipated. If the condition is more frequently thought of, an ante mortem diagnosis may be possible. We suspect that papillary



CUT SURFACE OF THE KIDNEY
A. Necrotic papilla
B. Extensive necrosis of medulla with sloughed papillae

necrosis will be associated clinically with urinary tract infection, azotemia, and diabetic coma which is resistant to insulin therapy.

SUMMARY

The literature on the subject of renal papillary necrosis complicating diabetes mellitus is reviewed. The etiology of renal papillary necrosis, and the relationship of the disease to diabetes mellitus are discussed. A case of papillary necrosis of the kidneys as a complication of diabetes mellitus is presented.

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TUBERCULOSIS ABSTRACTS*

THE DIAGNOSIS OF ACTIVITY IN PULMONARY TUBERCULOSIS

There is no single word in the vocabulary of clinical tuberculosis more widely employed nor more widely misunderstood than the word "activity." The ancient fallacy still persists that rales arise in moisture, which signifies inflammation and hence, activity. Another more dangerous fallacy is that activity is usually accompanied by slight changes in temperature, pulse, weight, appetite and physical energy.

The two essential requirements of a scientifically sound and clinically useful concept of activity are that it must be securely based on the anatomic state of the tuberculosis lesion and must also be synonymous with need for treatment. Such a concept must include three distinct groups of cases: those which show anatomic progression; those which are anatomically stationary but not healed; and those which are retrogressive but not yet safely healed.

In determining whether or not a case requires treatment, the symptoms, physical signs, laboratory data, and x-ray picture may all be used—or misused.

The symptoms of pulmonary tuberculosis are familiar to all physicians. When a group of them is present there is usually no doubt about activity. When only one or two of them are present they may be erroneously attributed to the minimal lesion shown in the x-ray film. Serial films are the only safeguard against this error.

A more common and more serious error is to exclude activity because of the absence of symptoms. It cannot be emphasized too strongly that tuberculosis, both in its onset, and during the early period of relapse, is characteristically a symptom-free disease. To depend upon symptoms, or to await the development of symptoms, is to lose the most favorable moment for treatment. Surveys have shown that when the diagnosis is based upon symptoms, 87 per cent of the cases will have advanced disease. Increasing numbers of hospital beds are filled with patients whose symptom-free, early disease was discovered in a survey or induction examination a year or so earlier, but who refused treatment and continued to work until they felt sick and had advanced disease.

Physical signs are of still less value than symptoms in determining activity. Inspection, palpation, and percussion are not to be trusted and auscultation is but little better. Coarse, or moderately coarse, moist rales, do usually indicate activity. They are often absent, even in far-advanced disease. Conversely, rales of the fine, or moderately coarse, dry type are often present throughout the entire life of a person with well-healed tuberculosis.

The Diagnosis of Activity in Pulmonary Tuberculosis (with case reports and illustrative films), Raymond C. McKay, M.D., Postgraduate Medicine, May. 1947.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Association.

The President's Page

When I look back over the years of medical practice that I have experienced I realize what a great honor it is to have my colleagues show their confidence in me by naming me as President for the year 1948. As I assume my duties, I realize that my presidential ancestors have contributed much more to organized medicine than I can ever hope to accomplish. Truly, I accept the duties with the greatest humility.

Realizing that the County Medical Society is the basis for state organization, I hope to acquaint myself with each and every local organization and learn as much as possible about their functions as related to the State Medical Association. By so doing, I am sure that the educational balance of the society can be more readily understood, and that the basis of unity and friendship, so necessary today, will be most likely found in the confines of the local organization. I want to talk to as many physicians as possible and get a composite picture regarding the present day practice of medicine, so that some time in the future I will be able to chart intelligently our proper course when dealing with problems affecting our practicing physicians.

I have had the pleasure to attend recent meetings of the Council and I am sure that the activities of this group of selected men from our Association are constructive and that your best interests are always given serious consideration in their deliberations. However, there is much left for the present organization to keep them busy during the entire year. After considerable thought and study, our committees have been named, and I would suggest that each and every member of such committees familiarize himself with his respective duties. I urge the chairmen to call meetings early in the year so that proper consideration may be given to the work that lies ahead.

My able predecessor, Dr. W. H. St. Clair, has been very generous in his praise of and hopes for the writer. My answer is that I shall endeavor not to disappoint him and shall do everything in my power to carry out his wishes. Certainly Doctor St. Clair has rendered the association invaluable service during the past year and I have no doubt that he will continue his able leadership as Chairman of the Council.

Thomas Bee

President.

West Virginia Medical Journal

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TOM BESS, PRESIDENT

On New Year's Day, 1948, Thomas Bess, M. D., of Keyser, will assume the presidency of the West Virginia State Medical Association by virtue of his election to this high office at the 80th annual meeting of the House of Delegates, held last May in Charleston. Doctor Bess succeeds Dr. Wade H. St. Clair, of Bluefield, who becomes chairman of the Council. The constitution of the State Medical Association very wisely provides that when a member is elected president he will serve as a member of the Council for three consecutive years. First he is the president, then chairman of the council, and finally member at large. The retiring chairman, Dr. Andrew E. Amick, will serve throughout 1948 as member-at-large.

The new president is not acquainted with all of the members of the state medical association, but he takes office with the avowed intention of visiting each of the 29 component societies and meeting as many members as may be possible during his term of office. His retirement from active surgical practice while still robust and in excellent health means that he will have the time to develop a program and the energy to see it through. We shall hear more of this as his ambitious plans begin to unfold.

Doctor Bess follows an official who has devoted much time and thought to the office. Wade St. Clair has never hesitated to speak out and act, always in the interest of the people of his state. He has proved to be a "foe to be reckoned with" in the fight against state medicine, believing that compulsory health insurance is bad in principle and practice, not only for medicine but for the people of our state and nation. His President's Page appearing monthly in the Journal has carried to the membership well thought out answers to some of the more important medical problems of today. His services will continue, for, as chairman of the Council, he will have much to do in charting the course to be followed during the next two years.

Tom Bess is, indeed, a worthy successor to "Doctor Wade", and, in wishing him Godspeed at the beginning of his term, we feel that the Association's affairs are in good hands.

MEDICAL EDUCATION IN VIRGINIA

It is with considerable apprehension that we contemplate Governor Tuck's ideas of consolidating the governing boards of the two medical schools in the Old Dominion. It is true that each institution is run at a huge pecuniary loss, largely due, we believe, to the handling of so many charity patients for clinical teaching. Moreover, medical education is the most costly of all forms of education. We can very readily understand also the desire of an executive to have the accounts of each state institution show the balance in somber black.

According to a recent press report, Governor Tuck has asked the General Education Board to have Dr. Alan Gregg survey the two medical schools in Virginia and advise him as to the wisdom of having a single governing board for the two institutions. That is, of course, a step in the right direction, for a better selection for adviser upon medical schools could not have been chosen. However, forty years' observation of medical education in Virginia, during fourteen of which we have served as a member of a state board of medical examiners, has convinced us that both these institutions as they have been run have turned out excellent graduates, well grounded in both the theory and the practice of medicine. By any criterion, Virginia is one of the best governed of the American commonwealths; her indebtedness is, comparatively speaking, inconsiderable, and her economic condition absolutely sound.

Is there any good reason then why Virginia should not maintain two separate medical schools? Certainly when we consider the national need for more graduates in medicine, we are in-

clined to the opinion that medical schools should increase their facilities rather than have them hampered in any manner. Our observation has led us to believe that the spirit existing between the two Virginia medical schools is of the very best as they are now administered and we wonder if one board managing both schools might not have a tendency to mar this excellent spirit now extant between them.

We would offer a suggestion which we believe Governor Tuck might consider. The large item of deficit at each institution is the maintenance of charity patients in the hospitals to provide a sufficient volume of clinical teaching material. Why not continue the present governing boards and request the General Assembly of Virginia to appropriate to the Governor of the Commonwealth a fund sufficient to cover the deficit and allow him to allocate it to the teaching hospitals as needed for the indigent patients of the State? Each indigent patient could be allowed choice between the teaching hospital in Charlottesville and that in Richmond. Such an arrangement would supply ample clinical teaching material, would cover the deficit, would tend to better health and medical care for the indigent segment of Virginia's population, would maintain the status quo in medical education in the Old Dominion, and would at the same time permit the Governor to control the money needed to make up the deficit in running the medical schools, and incidentally give him a better insight into medical education and health matters in the state.

HOLMAN TAYLOR, M. D.

One of America's most unique and colorful physicians has gone to "that undiscovered country from whose bourne no traveler returns". For more than a quarter of a century Secretary of the organized profession of Texas, Editor of the Texas Medical Journal, and a Member of the House of Delegates of the American Medical Association, Holman Taylor was one of the outstanding medical men in the United States, and his influence in shaping medical policies was vast.

On the night of December sixth, the profession of Fort Worth gave a testimonial dinner for Dr. Taylor in recognition of his services to medicine generally and to the organized profession of the Lone Star State in particular. At the close of the festivities, while leaving the hall, Dr. Taylor suffered a coronary attack, his second in two years, and expired almost immediately.

Holman Taylor was an outstanding citizen. Although a physician first, he did not live in a medical dugout, but engaged in all the civic activities of his community. For instance, during World War I he commanded an infantry regiment and for years after the close of that conflict was a Brigadier General in the Infantry Reserve.

Quite a wit, quick at repartee, an incisive thinker, able in debate, and a master parliamentarian, he was one of the most influential members of the House of Delegates. Likewise, he was outstanding in the Conference of Secretaries and Editors, having been an original member of that group. Not only Texas medicine, but the entire profession of the United States is the poorer for his passing.

UNDER ONE ROOF

One of the best Christmas presents that Santa Claus could bring to the doctors of West Virginia would be an auditorium somewhere in the state large enough to house all of the various activities of an annual convention. We feel that all state organizations which meet annually will agree with us that now as never before West Virginia needs such a building.

Some far-sighted, enterprising group of our citizens will some of these days become tired of waiting for someone else to provide a building of the size needed and will do the job themselves. Then watch the lucky city bag all of the many conventions held annually in this state. Let us hope that the spade work begins soon.

NEED A MEDICAL SECRETARY?

"Doctor, I would like to work for you in your office. I was graduated from a junior college in the medical secretarial course. I studied medical dictation, medical bookkeeping, first aid, chemistry, biology, zoology, and bacteriology."

If you were to select an assistant on the qualifications given by this applicant, would you employ her?

Do you prefer the secretary whose training has strong emphasis on general shorthand dictation, good English usage, typewriting skill, and general accounting? Or rather do you choose the secretary who replaced a part of this training with courses in medical terms and the sciences?

One doctor says, "Just teach the medical terms." Another says, "Teach good English usage, arithmetic, and spelling; I'll teach the medical

terms used in my practice." What do you expect to find in the person you employ?

Potomac State School of West Virginia University, at Keyser, wants to know whether doctors are finding medical secretaries worthwhile assistants. The following medical secretarial course is being offered as part of the program to train young women for this work:

FIRST YEAR

	Semester Hours
English Composition and Rhetoric	6
Shorthand	6
Typewriting	4
Physical Education	2
First Aid	2
Inorganic Chemistry	6
General Biology	3
Vertebrate Zoology	3
Medical Bookkeeping	2
	34

SECOND YEAR

Medical Dictation and Transcription	8
Physical Education	2
Business Correspondence	2
Business Arithmetic	2
General Bacteriology	3
General Science Survey Laboratory	4
Introduction to Psychology	6
Office Practice	3
	30

The dean of Potomac State, Prof. K. S. McKee, wants the members of the West Virginia State Medical Association to evaluate for him and the school the usefulness of the program outlined. We hope that many of our members will give the matter serious consideration and then let Professor McKee have the benefit of any suggestions or criticism they may have to offer.

PREVENTIVE GERIATRICS

The fact that so many infections have been controlled, or virtually abolished, puts the degenerative diseases far ahead in morbidity and mortality statistics.

It has long seemed to me that one of the chief functions of a health officer is educational. He, far more than the private practitioner, is looked upon by the public as the spokesman for the medical profession. He need have no inhibitions in giving health information over the radio and in the newspaper, whereas the private practitioner, like Caesar's wife, must be above suspicion—in this case, the suspicion of unethical self-advertising.

In this matter of educating—or perhaps better, informing—the public, the prevention of infectious diseases has been stressed. It seems to me that now, when the degenerative diseases are coming to be of far greater importance, the health officer might well give more emphasis to preventive geriatrics, or what Dr. M. W. Thewlis calls "preclinical medicine." Information about the measures that may be taken to postpone the wearing-out process could be disseminated not only through the mediums of the press and radio, but in mental hygiene clinics for older people.—Wingate M. Johnson, M. D., in Geriatrics.

General News

NEW OFFICERS OF STATE MEDICAL ASSOCIATION ASSUME DUTIES JAN. 1

The new officers of the West Virginia State Medical Association, elected at the annual meeting of the House of Delegates at Charleston last May, will assume their duties the first of January.

Dr. Thomas Bess, of Keyser, succeeds Dr. Wade H. St. Clair, of Bluefield, as President.

—Photo by Murray R. White
Dr. Thomas Bess

Dr. Spencer L. Bivens, of Charleston, and Dr. Harold Van Hoose, of Man, take office as first and second vice presidents, respectively.

Dr. T. Maxfield Barber, of Charleston, continues as treasurer of the Association, an office he has held for twenty-three consecutive years.

The new Councillors are as follows: First district, Dr. Russel B. Bailey, Wheeling; second, Dr. Fred R. Whitlesey, Morgantown; third, Dr. E. H. Hunter, Webster Springs; fourth, Dr. James S. Klumpp, Huntington; fifth, Dr. J. C. Lawson, Williamson; and sixth, Dr. D. C. Ashton, Beckley. They succeed, respectively, Drs. R. D. Gill, Wheeling, Carl E. Johnson, Morgantown, E. A. Trinkle, Weston, W. C. Swann, Huntington, N. H. Dyer, Charleston (Bartley), and W. P. Bittinger, Summerlee, all of whom have served two consecutive terms as members of the Council.

Dr. Wade H. St. Clair, retiring president, will serve as chairman of the Council, succeeding Dr. Andrew E. Amick, of Lewisburg, who continues as member-at-large.

New chairmen and members of Association committees appointed by Doctor Bess will also assume their duties the first of January.

COUNCIL APPROVES NEW FEE SCHEDULE AND RENEWAL OF AGREEMENT WITH VA

Final action has been taken by the Council of the West Virginia State Medical Association on the renewal of the agreement with the Veterans Administration for home town out-patient care of veterans. The agreement prepared by the government was approved, with minor amendments, at a meeting held December 3 at Charleston.

At this meeting the Council also approved the fee schedule which was negotiated with the Veterans Administration by the Association's Veterans Board of Review. The members of the board are Dr. Claude B. Smith, Charleston, Chairman; and Drs. James R. Brown, Huntington, and Paul H. Revercomb, Charleston.

Dr. D. A. MacGregor, Chairman of the fact finding and planning committee, submitted a report concerning the consideration by his committee of the request of the state insurance commissioner for a definition of hospital and medical service.

The committee explored the whole field of these two services and expressed the opinion that "medical service" and "hospital service" as defined in resolutions adopted by the American Medical Association's House of Delegates in 1942, 1943, and 1947, be accepted by the Council. Doctor MacGregor referred specifically to the resolution adopted at the annual meeting of the House of Delegates of the West Virginia State Medical Association in Charleston last May, which was made the basis for the resolution on the subject, submitted by Dr. Walter E. Vest, member from West Virginia, and unanimously adopted at the meeting of the American Medical Association, in Atlantic City, last June.

The committee recommended that a special committee of members of the Council be appointed with instructions to try to arrange a meeting with a similar committee from the West Virginia Hospital Association to discuss the matters presented by the insurance commissioner, and the manner in which "the recommendations can best be put into effect without serious embarrassment to hospital income."

The Council authorized and directed the chairman to appoint a special committee to consider this matter. The committee was given full power to act with instructions to recommend a definition of hospital and medical service in the event it is impossible to reach an agreement with the committee proposed to be appointed by the West Virginia Hospital Association.

The following doctors were elected to honorary lifetime membership in the Association:

Phoebia Gean Moore, Mannington
William Burkhart Scherr, Morgantown

The Council went on record as being opposed to the free hospitalization plan for the tuberculous proposed by the West Virginia Tuberculosis and Health Association.

The following resolution submitted by the retiring chairman, Dr. Andrew E. Amick, of Lewisburg, was unanimously adopted:

WHEREAS, Many changes in our present laws and regulations pertaining to public health are needed if West Virginia is to remain in the forefront of states seeking to improve the health conditions of the people.

BE IT RESOLVED, That the Council of the West Virginia State Medical Association go on record as follows:

(a) We advocate the revision of our medical practice act and public health laws principally to meet changed and changing conditions. In this we request the cooperation of the Public Health Council, and the Legislative Committee, and the Fact Finding and Planning Committee of the West Virginia State Medical Association.

(b) We believe that in the administration of public health, preventive medicine, health education and sanitation should be emphasized.

(c) We believe that the distribution and use without charge of serums and vaccines should be limited to that segment of the population which is unable to pay for same.

(d) We recommend that school doctors be appointed for each county or group of counties in the state; and that sex education be added to the curriculum of our public schools.

(e) We believe that an effort should be made to organize for our schools in the elementary grades a campaign designed to educate our children to the needs for doctors and nurses. In these grades, we must seek to instill in the minds of our children the importance of studying medicine and nursing, and further, the importance of their returning to practice in our own state upon the completion of their education.

(f) We recommend that additional appropriations be sought for local health departments; and, realizing the great need for improvement in health facilities in our rural areas, we recommend that sufficient funds be appropriated by the legislature to provide for a full-time health department in each county or group of counties in West Virginia.

(g) We recommend that patients in our state tuberculosis sanatoria be charged for hospitalization in accordance with their ability to pay.

The Council received from Dr. Russell B. Bailey, of Wheeling, councillor elect from the first district, a blue print for the reorganization of the state health department with its various bureaus and divisions. This plan was referred to the Fact Finding and Planning committee for consideration in connection with the recommendations incorporated in the resolution submitted by Doctor Amick.

The following members of the Council were present at the meeting: Dr. Andrew E. Amick, Chairman; and Drs. Wade H. St. Clair, James S. Klumpp, T. M. Barber, R. D. Gill, J. P. Helmick, M. H. Porterfield, W. C. Swann, J. L. Patterson, W. P. Bittinger, and Thomas G. Reed; and Mr. Charles Lively, secretary ex officio.

The meeting was also attended by Dr. Thomas Bess, president elect; Dr. D. A. MacGregor, chairman of the Fact Finding and Planning committee; Dr. Spencer L. Bivens, first vice president elect; Dr. Harold Van Hoose, second vice president elect; and Drs. R. B. Bailey, E. H Hunter, J. C. Lawson, and D. C. Ashton, councillors elect.

DR. PAUL R. GERHARDT NAMED HEAD OF N. Y. DIVISION OF CANCER CONTROL

Dr. Paul R. Gerhardt, of Charleston, director of the division of cancer control of the state health department, has resigned to accept appointment as director of the New York State Health Department's division of cancer control, with headquarters in Albany. His resignation is effective January 1, 1948. No successor has been appointed by Dr. N. H. Dyer, state health commissioner.

Doctor Gerhardt goes to New York at a time when the cancer control program in that state is being expanded to meet present needs. Direct services to the indigent and medically indigent cancer patients will be provided under a plan similar to that being operated so successfully in West Virginia.

Doctor Gerhardt accepted appointment as director of the cancer control division in July, 1944. He is a graduate of the University of Wisconsin School of Medicine and was engaged in general practice in Boone County for three years before accepting appointment in 1942 as director of the bureau of medical services of the department of public assistance.

In addition to his duties in the cancer control division, Doctor Gerhardt served from January until November, 1947, as director of the hospital survey and planning board, set up in connection with the Hill-Burton bill for hospital construction. The survey was completed a few weeks ago and has been approved by the United States Public Health Service.

THIRD ANNUAL RURAL HEALTH CONFERENCE

The third annual meeting of the national conference on rural health will be held at the Palmer House in Chicago, February 6-7, 1948. Dr. F. S. Crockett, chairman of the committee on rural medical service, will preside at the meeting, which is being sponsored by the American Medical Association, and which will be held in cooperation with the American Academy of Pediatrics and representative farm organizations.

The national health program of the American Medical Association holds "that every child should have proper attention, including scientific nutrition, immunization, and other services included in infant welfare."

In a statement issued by Dr. F. S. Crockett, the chairman, concerning the extension of the program to the rural areas of our country, it is pointed out that "the American doctor invites the help of the American farm family in protecting the rural child so that his future will be built upon an heritage carefully and intelligently planned."

SECOND MIDWEST REGIONAL CONFERENCE

The second midwest regional conference sponsored by the Council on Medical Service of the American Medical Association will be held at the Hotel Cleveland, in Cleveland, Sunday, January 4, the day preceding the midwinter meeting of the A.M.A. House of Delegates. Medical societies and associations from the following states are members of the conference: Illinois, Indiana, Kentucky, Michigan, Ohio, and West Virginia.

RURAL HEALTH CONFERENCE AWAITS SURVEY BY STATE HEALTH DEPARTMENT

The first rural health conference sponsored by the State Medical Association was held at the State 4-H Camp, at Jackson's Mill, November 20. Dr. Ira F. Hartman, Chairman of the Association's Committee on Rural Health, presided as chairman, and led roundtable discussions at the morning and afternoon sessions.

The needs for rural medical care and hospital service were stressed by J. O. Knapp, director of Agricultural Extension Service at West Virginia University; Miss Gertrude Humphreys, state leader, Home Demonstration Work; and, Mrs. Dayton Stemple, of Philippi, representing the Farm Women's Council.

Plans for improved medical care were discussed by Dr. Thomas Bess, president elect of the State Medical Association; Dr. N. H. Dyer, state health commissioner; Dr. E. J. Van Liere, dean of the West Virginia University School of Medicine; Mrs. F. C. Chandler, of Bridgeport, president of the Woman's Auxiliary to the State Medical Association; and, Mr. Charles Lively, executive secretary of the State Medical Association.

Following roundtable discussions which lasted throughout the morning and part of the afternoon, Doctor Dyer reported that the state health department plans to establish a full-time health department for each area of the state with 50,000 population. These departments are to be headed by doctors who have had some training in public health. Doctor Dyer also stated that it is proposed to employ a sanitarian for each group of from fifteen to twenty thousand people, and a public health nurse for each group of five thousand people. The cost is estimated at one dollar per person per annum for this service. The state health commissioner stressed the need for at least twenty-two health units in West Virginia, with a health center as an integral part of each unit. At the present time, there are but ten full-time health departments in the state.

It was agreed by those present that no further meeting or conference should be held before the completion by the state health department of an overall survey of health conditions and needs for the entire state. This survey is now being completed by the state health department, and a copy of the plan, with accompanying charts, will be supplied to farm groups prior to the next meeting of the conference, which will be held after there has been an opportunity for study of the state health department's statewide survey.

Besides Doctor Knapp, Miss Humphreys and Mrs. Stemple, the following representatives of farm groups attended the meeting: Burl Gall, Weston, Farm Bureau; Mrs. Ivan Coberly, Elkins, Farm Women's Council; Miss Eloise Cofer, Morgantown, Agricultural Extension Service; R. G. Ellyson, Morgantown, state director, Farmer's Home Administration; Miss Roberta Rohr, Clarksburg, Older Youth's group; W. H. Wayman, Clarksburg, Vocational Agriculture; Miss Madge Duncan, Clarksburg, State Nurses Association; and Mrs. Carmella Murphy, Morgantown, Farmer's Home Administration.

PERSONNEL OF COMMITTEES FOR 1948 NAMED BY NEW PRESIDENT

Dr. Thomas Bess of Keyser, president elect of the West Virginia State Medical Association has named personnel of standing and special committees for 1948.

Dr. Russell C. Bond, of Wheeling, heads the committee on Child Welfare. The members of the committee, named at the annual meeting of the House of Delegates in May, 1947, are as follows: Henrietta L. Marquis, Charleston; Raymond Sloan, Huntington; Carl E. Johnson, Morgantown; Harlow Connell, Bluefield; A. A. Shawkey, Charleston; and Theresa O. Snaith, Weston.

Dr. Elizabeth McFetridge, of Shepherdstown, is the new chairman of the committee on Maternal Welfare. The other members of the committee, also elected last May, are as follows: Carl S. Bickel, Wheeling; E. F. Heiskell, Morgantown; J. E. Page, Clarksburg; E. J. Humphrey, Huntington; H. G. Steele, Bluefield; and M. B. Williams, Wheeling.

The Scientific Work committee was named by Doctor Bess shortly after the 1947 convention. This committee is composed of Dr. Russell B. Bailey, of Wheeling, Chairman; and Drs. W. W. Point, Charleston, and George F. Evans, Clarksburg.

The members of the Publication Committee are elected by the Council. This committee is composed of Dr. Walter E. Vest, Huntington, Chairman; and Drs. E. J. Van Liere, Morgantown; Wm. M. Sheppe, Wheeling; G. G. Irwin, Charleston; and R. H. Edwards, Welch.

Standing Committees

The following is the complete list of members of other standing committees appointed by Doctor Bess:

Cancer: J. Ross Hunter, Charleston, Chairman; Russell B. Bailey, Wheeling; Chauncey B. Wright, Huntington; Paul R. Gerhardt, Charleston; H. H. Haynes, Clarksburg; M. W. Sinclair, Bluefield; Thomas L. Harris, Parkersburg; and Hu C. Myers, Philippi.

Revision of Constitution and By-Laws: Robert J. Reed, Jr., Wheeling, Chairman; Robert K. Buford, Charleston; Walter E. Vest, Huntington; C. R. Ogden, Clarksburg; J. Howard Anderson, Hemphill; and T. W. Moore, Huntington.

D. P. A. Advisory: Hugh A. Bailey, Charleston, Chairman; Claude B. Smith, Charleston; and H. M. Escue, Charleston.

Fact Finding and Planning: D. A. MacGregor, Wheeling, Chairman; Guy H. Michael, Parsons; Bert Bradford, Jr., Charleston; W. E. Brewer, Logan; Ray M. Bobbitt, Huntington; Carl E. Johnson, Morgantown; James L. Wade, Parkersburg; C. O. Post, Clarksburg; and E. L. Gage, Bluefield.

Industrial Health: J. L. Patterson, Logan, Chairman; J. J. Brandabur, Huntington; H. M. Brown, Belle; W. F. Rogers, Parkersburg; W. V. Wilkerson, Prenter; W. P. Bittinger, Summerlee; George W. Easley, Williamson; George T. Evans, Idamay; and George O. Nelson, Nitro.

Legislation: Frank V. Langfitt, Clarksburg, Chairman; Russell Kessel, Charleston; James S. Klumpp, Huntington; R. O. Rogers, Bluefield; W. P. Black, Charleston; Ward Wylie, Mullens; and A. U. Tieche, Beckley.

Medical Education: Thomas L. Harris, Parkersburg, Chairman; W. M. Sheppe, Wheeling; W. T. Gocke, Clarksburg; E. J. Van Liere, Morgantown; D. N. Barber, Charleston; R. J. Wilkinson, Huntington; Frank J. Holroyd, Princeton; and M. H. Porterfield, Martinsburg.

Necrology: Harry G. Steele, Bluefield, Chairman; Roy Ben Miller, Parkersburg; R. J. Reed, Wheeling; James McClung, Richwood; James R. Bloss, Huntington; and T. Jud McBee, Morgantown.

Publicity: S. S. Hall, Clarksburg, Chairman; Ben I. Golden, Elkins; J. W. Hash, Charleston; W. C. D. McCuskey, Wheeling; Athey R. Lutz, Parkersburg; and B. W. McNeer, Hinton.

Syphilis: John F. McCuskey, Clarksburg, Chairman; C. A. Hoffman, Huntington; Paul R. Wilson, Piedmont; N. H. Dyer, Charleston; R. C. Neale, Bluefield; and W. Carroll Boggs, Wheeling.

Conservation of Vision and Hearing: John H. Trotter, Morgantown, Chairman; V. E. Holcombe, Charleston; S. S. Hall, Clarksburg; A. C. Chandler, Charleston; F. O. Marple, Huntington; S. H. Burton, Weston; Ben Bird, Princeton; and E. C. Hartman, Parkersburg.

Special Committees

The following is the personnel of the special committees appointed by Doctor Bess to serve during 1948:

Diabetes: W. M. Sheppe, Wheeling, Chairman; Fred Whittlesey, Morgantown; Wm. A. Thornhill, Jr., Charleston; R. C. Neale, Bluefield; L. R. Lambert, Fairmont; F. C. Hodges, Huntington; and D. C. Ashton, Beckley.

Mental Hygiene: O. B. Biern, Huntington, Chairman; W. B. Rossman, Charleston; E. F. Reaser, Huntington; J. L. Knapp, Weston; O. N. Morison, Charleston; A. L. Wanner, Wheeling; Geo. D. Johnson, Huntington; N. H. Dyer, Charleston; A. A. Wilson, Charleston; E. L. Gage, Bluefield; and C. E. Hamner, Spencer.

Permanent Home: O. H. Bobbitt, Charleston, Chairman; W. W. Strange, Huntington; C. M. Scott, Bluefield; E. E. Vermillion, Welch; and H. H. Howell, Madison.

Rural Health: Ira F. Hartman, Buckhannon, Chairman; R. M. Fisher, Weston; Andrew E. Amick, Lewisburg; H. C. Miller, Eglon; and John W. Pyles, New Martinsville.

Tuberculosis: W. L. Cooke, Charleston, Chairman; G. E. Gwinn, Beckley; David Salkin, Hopemont; E. T. Goff, Parkersburg; J. N. Reeves, Charleston; J. P. McMullen, Wellsburg; and George F. Evans, Clarksburg.

Veterans Board of Review: James R. Brown, Huntington, Chairman; Claude B. Smith, Charleston; and Paul H. Revercomb, Charleston.

RELOCATIONS

Dr. J. K. Pickens, formerly of Layland, who has been located at Fort Dodge, Iowa, has returned to West Virginia and relocated at Charleston. He has offices with Dr. A. P. Hudgins, in the Professional Building. Doctor Pickens has recently had postgraduate work in obstetrics and gynecology at the Margaret Hague Maternity Center in Jersey City, N. J.

* * * *

Dr. George H. Brown, of Wheeling, who spent several months doing postgraduate work in radiology at New Haven, Connecticut, has returned to Wheeling and is associated with Dr. C. H. Clovis in the practice of his specialty.

SCIENTIFIC EXHIBIT

Dr. Hu C. Myers, of Philippi, Chairman of the Committee on Scientific Exhibit, has requested that all members who desire to arrange exhibits for the 81st annual meeting of the State Medical Association at Huntington in May, 1948, file application immediately for space. Such applications should be addressed to Doctor Myers or Dr. Chauncey B. Wright, of Huntington, or Dr. Melford L. Hobbs, of Morgantown, members of the committee.

GOLD STAR AWARDED BY PRESIDENT TO DR. GEO. M. LYON, OF HUNTINGTON

Dr. George M. Lyon, of Huntington (Captain, MC, USNR), has been awarded the Gold Star in lieu of the Second Legion of Merit for "exceptionally meritorious conduct in the performance of outstanding services for the government."

Previously, while serving as a captain in the Navy during World War II, Doctor Lyon had been awarded the Bronze Star medal, the Legion of Merit, and a citation for "meritorious performance of duty as chemical warfare officer on the staff of the Commander, U. S. Naval Service in Europe."

Doctor Lyon, who recently assumed his new duties as chief of the radioisotope section in the Veterans Administration, served as safety advisor and officer in charge of safety and medical elements on "Operation Crossroads" from January, 1946, until May, 1947.

The citation in connection with the award of the Gold Star to Doctor Lyon on November 21, 1947, is as follows:

"For exceptionally meritorious conduct in the performance of outstanding services to the Government of the United States as Safety Officer for Joint Task Force ONE and Safety Advisor to the Commander, Joint Task Force ONE, during operation CROSSROADS from January 11 to November 1, 1946. Responsible for the preparation of the safety plan for the Task Force, Captain Lyon also continually advised the Task Force Commander as to safety measures for protection against normal and abnormal hazards incident to the detonation of two atomic bombs and the inspection of target ships. The adequacy and thoroughness of the safety measures prescribed by Captain Lyon and carried out under his general supervision were evidenced by the safety record achieved during the operation. As Training Officer for the Radiological Safety School established by the Task Force Commander, Captain Lyon contributed to the success of the program and to the beneficial effects extending to the post-CROSSROADS activities of the Army and Navy in the problem of radiological safety. His performance of an exacting assignment reflects the highest credit upon the United States Naval Service."

The award was made by President Truman through John L. Sullivan, Secretary of the Navy.

DR. JAMES H. WALKER ON SMA PROGRAM

Dr. James H. Walker, son of the late Dr. Rome H. Walker, of Charleston, presented a paper before the section on surgery at the annual meeting of the Southern Medical Association, November 24, at Baltimore. His subject was, "Clinical Evaluation of Tetraethyl Ammonium."

Doctor Walker received his M. D. degree at the University of Maryland Medical School in 1941 and afterwards served three years in the Army Medical Corps, being stationed first in Alaska, and then in the ETO. He will complete a residency in surgery at University Hospital, Baltimore, July 1, 1948, and will then take special work in surgery under Dr. Richard Hollis Overholt, of Boston.

COMMITTEE RECOMMENDS TWO NEW HOSPITALS

The Mental Hygiene Committee of the West Virginia State Medical Association has unanimously recommended to the Council that an appropriation be sought at the biennial session of the legislature in 1949 for the construction and maintenance of a new mental hospital in West Virginia, and a separate hospital for the feebleminded and the epileptic.

The committee plans for the organization of a state mental hygiene society, and the chairman, Dr. O. B. Biern, of Huntington, has been directed to arrange for an organization meeting to be attended by representatives of the association's 29 component societies. The meeting will be held in Charleston early in the spring.

The committee is taking steps to provide for the part-time services of psychiatrists from our state mental institutions in local mental hygiene clinics.

Besides Doctor Biern, the committee is composed of Drs. W. B. Rossman, O. N. Morrison, A. A. Wilson, and N. H. Dyer, of Charleston, E. F. Reaser and George D. Johnson, of Huntington, J. L. Knapp, of Weston, A. L. Wanner, of Wheeling, E. Lyle Gage, of Bluefield, and C. E. Hamner, of Spencer.

"GRASS ROOTS" CONFERENCE IN CLEVELAND

The second annual "grass roots" conference sponsored by the board of trustees of the American Medical Association will be held at the Statler Hotel, in Cleveland, Tuesday evening, January 6, during the interim session of the House of Delegates.

Dr. Frank J. Holroyd, of Princeton, is a member of the executive committee in charge of arrangements, and he states that the conference will be devoted for the most part to problems of the doctor engaged in general practice.

An invitation is being extended to all county medical society officers and copies of the program are being mailed to all such officers.

The subjects to be discussed include the following: (a) "The General Practitioner—How to Create More of Him for the Future Needs of the Country"; (b) "Upholding the Prestige of the General Practitioner"; and (c) "The General Practitioner and Community Leadership."

VETS IN PREMED AT WVU

The total enrollment at West Virginia University is 6645 students. Of this number, 3982 are veterans of World War II. The veterans thus constitute about 60 per cent of the total enrollment.

There are 674 premedical students at the University, which is roughly ten per cent of the total enrollment. Of this total enrollment, 298, or 44 per cent, are veterans. In the school of medicine proper, 56 students are enrolled. Forty of these, or 72 per cent, are veterans.

SMA SECTION HONORS DOCTOR DYER

Dr. N. H. Dyer, State Health Commissioner, was elected vice president of the section on public health at the annual meeting of the Southern Medical Association, November 24-26, in Baltimore.

INTERNATIONAL POLIO CONFERENCE

The National Foundation for Infantile Paralysis will sponsor the first International Poliomyelitis Conference, which will be held at the Waldorf-Astoria Hotel, in New York City, July 12-17.

The Department of State has been requested to transmit invitations to more than 60 foreign governments to send official delegates to the conference. These officials will be asked to present summarizations of the problems of poliomyelitis in their countries at a special session.

Dr. Thomas Parran, Surgeon General of the United States Public Health Service, will preside at the conference. Basil O'Connor, president of the National Foundation, will be the official host to the delegates, while Hart E. Van Riper, M. D., the Foundation's medical director, will serve as general chairman.

FORMER WEST VIRGINIA DOCTOR HONORED

Dr. Harry S. Mustard, director of the School of Public Health at Columbia University, has been appointed City Health Commissioner of New York City to succeed Dr. Israel Weinstein (J.A.M.A. Dec. 6, 1947).

Doctor Mustard was Preston county's first health officer. He was appointed by the state health commissioner in 1922 and served for 18 months. He came to West Virginia from Charleston, South Carolina, and after leaving this state, served for several years as director of the Commonwealth Fund's Child Health Demonstration in Tennessee, and also served as assistant state health commissioner. He was editor of the American Journal of Public Health for two years and was president of the Association of Schools of Public Health and the American Public Health Association in 1946.

DIETS OF RESTRICTED SODIUM CONTENT

Lonalac, nutritionally similar to whole milk powder but virtually free of sodium, aids in the maintenance of protein nutrition when milk, meat, eggs and cheese must be restricted. Congestive heart failure, hypertension and toxemia of pregnancy have been treated with low sodium diets. Sodium analyses of foods, diet plans, literature on uses of low sodium diets and samples of Lonalac are available from: Mead Johnson & Co., Evansville 21, Indiana.

DIRECTORY INFORMATION CARD

Hundreds of doctors in West Virginia have already filled in and mailed to the American Medical Association the information card sent to every doctor in the United States during November. The information requested will be used in compiling the 18th edition of the American Medical Directory, which will be published in 1948, and which will be the first issued since 1942.

Doctors who have not received the directory information card should write without delay to the Directory Department, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

STATE HEALTH DEPARTMENT SPONSORS DEMONSTRATION PREMATURE NURSERY

A demonstration premature nursery will be opened at the Herbert Thomas Memorial Hospital, in South Charleston, sometime in January, 1948.

The nursery, established under the auspices of the state health department, will offer adequate servics to doctors in the care of premature babies in Kanawha County. While no charge will be made, parents will be permitted to pay a part, or all of the expenses if they so desire, refund being made to the division of maternal and child health for the expenses incurred.

The personnel will consist of four local pediatricians and three nurses. The pediatricians are members of the hospital staff, and the nurses are employed by the institution. Special training was provided the nurses by the state health department.

A room, donated by the hospital, will consist of four units, a nurses' station, clean-up work room, observation unit, and the premature unit. Three incubators will be placed in the observation room, and five incubators and three bassinets in the premature unit.

An ambulance, purchased by the state health department will be available for this new service. The ambulance is equipped with one cot, a portable incubator, with oxygen available, and a sterile linen unit. In addition to servicing the prematures, the ambulance may be used for emergency maternal care. The Charleston Fire Department will provide the driver.

In view of the limited number of incubators at the nursery, priority will be given to prematures of 2 to 3½ pounds. When the infant is ready to leave the hospital the attending physician will be notified. Within 48 hours a public health nurse will visit the home to instruct the parents in the care of the child.

The project was made possible through an outright grant from the children's bureau of the federal security agency. The sum of $30,000 has been allocated to West Virginia to defray the expenses of the nursery to July 1, 1948.

Kanawha County was chosen for this demonstration because of the newly established city-county health department, which has sufficient trained personnel to do the required follow-up. Also, federal funds must be used in a non-profit hospital. Proximity to the division of maternal and child health for consultant and administrative purposes played a part in the choice.

Dr. Hallie Isabelle Morgan, director of the division of maternal and child health, originated the idea of the nursery. Details were worked out with the consultant service of the maternal welfare and child welfare committees of the West Virginia State Medical Association.

West Virginia is one of four states providing this type of service. However, the majority of states are in the process of establishing premature nurseries. The nursery is patterned after the Chicago program. Dr. Henrietta L. Marquis, pediatric consultant for the division of maternal and child health, has visited the Chicago health department and made a detailed study of its program.

Obituaries

DAVID BARNARD LEPPER, M. D.

Dr. David Barnard Lepper, 72, of Bluefield, died at a hospital in that city December 8, 1947, following an illness of six months.

Doctor Lepper received his M.D. degree at the Harvard University Medical School in 1902 and was licensed to practice in West Virginia in 1926. He served as captain in the Army Medical Corps in World War I, and for the past twenty-one years has been health officer for Mercer County. He was an honorary member of his local society, the West Virginia State Medical Association, and the American Medical Assotion.

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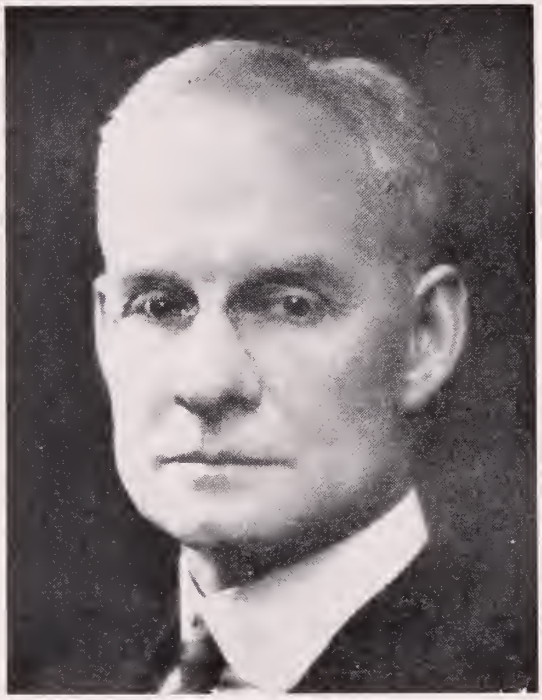
JOHN NATHAN SIMPSON, M. D.

Dr. John Nathan Simpson, 78, of Morgantown, died November 23, at a hospital in that city following an illness of several months' duration.

Doctor Simpson was born at Mason, West Virginia, and received his A.B. degree in 1893 from Peabody College for Teachers, Nashville, Tennessee, and his M.D. degree in 1902 from the Johns Hopkins University School of Medicine. He was licensed to practice in West Virginia that same year and located at Terra Alta. Later he had postgraduate work in Paris, Vienna, Berlin and London.

In 1902, Doctor Simpson organized the School of Medicine at West Virginia University, and served as its dean and professor of physiology from that date until his retirement in 1935. Upon his retirement as dean, he was named dean emeritus.



John Nathan Simpson, M. D.

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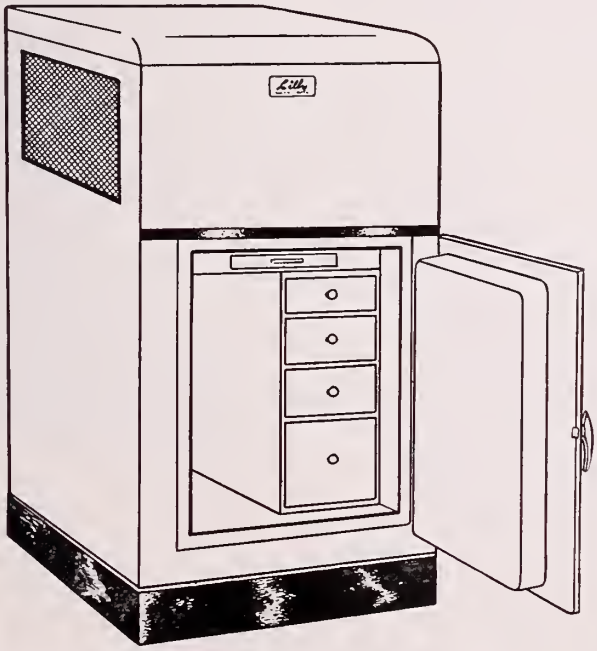

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All steel construction. Drawers perforated to permit free circulation of air, with chrome plated drawer pulls. Accurate temperature control with minimum 30° F to prevent freezing. Compressor and motor built in single compact unit for easy removal for service. Fibreglass insulation assures long life with compressor compartment insulated to reduce sound. Over-all dimensions 35½x19½x18⅛. Top drawer 3x5½x10¾. Middle drawer 3x5½x10¾. Bottom drawer 5½x5½x10¾. Open space 6x15x12.

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It was through his efforts that the present building used as a school of medicine was constructed at the University.

Doctor Simpson served as director of the hygienic laboratory of the state health department from 1913 until 1917. He was surgeon for the cadet corps at the University from 1902 to 1927. During World War I, he was Army medical examiner, serving with the rank of captain.

Doctor Simpson had served as president of the Monongalia County Society, and in 1923 was elected president of the West Virginia State Medical Association. At the time of his death, Dr. Simpson was an honorary member of his county medical society, the West Virginia State Medical Association, and the American Medical Association.

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DAVID WILLIAM SHIRKEY, M. D.

Dr. David William Shirkey, 77, of Montgomery, died at his home in that city November 19, 1947, following an illness of two years.

Doctor Shirkey was born at Sissonville, son of the late Henry A. and Elizabeth (Rose) Shirkey. Following his education in the public schools, he graduated from the College of Physicians and Surgeons, in Baltimore, in 1891, being licensed to practice in West Virginia that same year.

After serving an internship in Baltimore, he located for the practice of his profession at Cicerone, in Roane County. He also practiced at Walton and Clendenin before moving to Montgomery, where he remained in active practice until two years ago. Doctor Shirkey was an honorary member of the Fayette County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

He is survived by his widow, the former Matilda Caldwell, of Walton, and two brothers, H. A. Shirkey, of Sissonville, and Dr. Ivy Shirkey, of Washington, D. C.

CONGRESS ON INDUSTRIAL HEALTH

The 8th Annual Congress on Industrial Health will be held January 5-8, in Cleveland, during the midwinter meeting of the American Medical Association.

A dinner meeting is scheduled for Monday evening, January 5, at the Cleveland Hotel. The meeting is being arranged by the American Medical Association Council on Industrial Health and will also be sponsored by the Cleveland Chamber of Commerce and the Cleveland Academy of Medicine.

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M. G. STEMMERMANN, M. D., Medical Director

Diabetes Abstracts

THE A. D. A. FORECAST

The Journal is in receipt of a sample issue of a new publication entitled "A. D. A. Forecast." This is a magazine designed for lay reading and is sponsored by the American Diabetes Association. The purpose of this excellent new edition to the family of publications is to assist the physician in the care of diabetic patients by providing a background of sound information.

The first issue contains little which is technical. There are seven main articles by such authorities as Dr. Joslin, Dr. Herman O. Mosenthal of New York, Dr. Joseph H. Barach of Pittsburgh, and others. It is our impression that the trend of the journal is inspirational and is designed to bolster the patient's courage in facing the vigorous routine demanded by this disease.

The selected articles also carry information which is not ordinarily available to the layman. The mother of every diabetic child would be tremendously helped by reading the contribution of Dr. Joseph H. Barach on "Growth in the Normal and in the Diabetic Child."

The advisory editorial board is made up of members of the American Diabetes Association who know from personal experience what the physician who treats diabetes wants his patients to know. This Board approves all material before it is published in the Forecast. It is very likely that the majority of intelligent diabetic patients will welcome this long-needed publication which will be introduced to the public first through the membership of the American Diabetes Association and second, through the general medical groups.

We are most favorably impressed by this diabetic Hygeia and feel that it has a long and useful future.—W. M. S.

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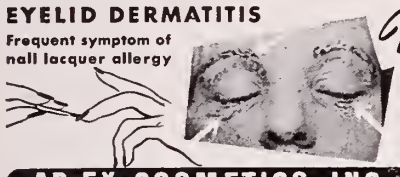
Frequent symptom of nail lacquer allergy



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County Society News

B-R-T

Dr. I. J. Hannsman, of Philippi, was the speaker at the regular quarterly meeting of the Barbour-Randolph-Tucker medical society, held December 4, at the City Hall, in Belington.

The speaker discussed "Diabetes" and stressed its importance in view of the fact that there are now four million diabetics in the United States. He outlined the accepted means of diagnosis and treatment, emphasizing education of the patient to the need for strict observance of the treatment prescribed.

Louie Perkins, formerly of Elkins, representative of the Upjohn Company, presented the Upjohn movie, "Energy Release From Food". The movie emphasizes the enzymatic action of nicotinamide, riboflavin and thiamine by use of colored animated structural formulas.

At the business meeting which followed the scientific program, Dr. C. E. Mitchell, of Valley Head, was elected to membership in the society.

The following officers were elected for the ensuing year: President, Guy H. Michael, Parsons; first vice president, Elmer E. Myers, Philippi; second vice president, Charles D. Leonard, Elkins; secretary-treasurer, Donald R. Roberts, Elkins; board of censors, F. K. Lyon, Parsons.

DONALD R. ROBERTS, M. D.,
Secretary.

* * * *

CABELL

Dr. Wallace M. Yater, of Washington, D. C., cardiologic consultant to the Veterans Administration, and Editor of the Medical Annals of the District of Columbia, was the guest speaker at the December 11th meeting of the Cabell County Medical Society, held at the Prichard Hotel in Huntington. His paper, "Coronary Disease in the Younger Age Group," was based on statistics covering coronary disease in World War II.

THOMAS L. GROVE, M. D.,
Secretary.

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FAYETTE

The following officers for 1948 were elected by the Fayette County Medical Society at a meeting held December 2 at the Hotel Hill, in Oak Hill: President, Wm. L. Claiborne, Montgomery; first vice president, W. E. Bundy, Oak Hill; second vice president, R. A. Updike, Montgomery; secretary-treasurer, C. B. Hughes, Montgomery; Delegates, G. G. Hodges, Mt. Hope; W. P. Bittinger, Summerlee; and B. F. Puckett, Oak Hill; alternates, J. N. Jarrett, Oak Hill; T. K.

Cook County Graduate School of Medicine

Announces Continuous Courses

SURGERY—Intensive Course in Surgical Technique, Two Weeks Starting January 19, February 16, March 15.
Surgical Technique, Surgical Anatomy & Clinical Surgery, Four Weeks, Starting February 2, March 1, March 29.
Surgical Anatomy & Clinical Surgery, Two Weeks, Starting February 16, March 15.
Surgery of Colon & Rectum, one Week, Starting March 8, April 26.
Surgical Pathology Every Two Weeks
FRACTURES & TRAUMATIC SURGERY—Intensive Course, Two Weeks, Starting June 7.
GYNECOLOGY—Intensive Course, Two Weeks, Starting February 23, March 29, Personal Course in Vaginaal Surgery Staraing February 16, March 22.
OBSTERICS—Intensive Course, Two weeks, Starting March 15, April 12.
MEDICINE—Intensive Course, Two Weeks, Starting April 26.
Personal Course in Gastroscopy, Two Weeks, Starting March 29, April 19.
Electrocardiography & Heart Disease, Four Weeks, Starting February 16, May 3.
CYSTOSCOPY—Ten Day Course Starting January 5, January 19, February 2.
DERMATOLOGY—Formal Course, Two Weeks, Starting April 26.
Clinical Course Every Two Weeks.

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Laird, Montgomery; and C. W. Stallard, Montgomery; and board of censors, R. A. Updike.

Dr. Thomas Bess, president of the West Virginia State Medical Association, will be the guest speaker at the January 6th meeting of the society, which will be held at the Tech Cafe in Montgomery.

JOE N. JARRETT, M. D.,
Secretary.

* * * *

FORT HENRY ACADEMY

Dr. Harry E. Le Fever, professor of neurosurgery at Ohio State University School of Medicine, Columbus, was the guest speaker at the regular monthly meeting of the Fort Henry Academy of Medicine, held November 25, in the auditorium of the School of Nursing at Wheeling Hospital, in Wheeling. His subject was "Common Lesions of the Spinal Cord". A roundtable discussion of Doctor Le Fever's paper was led by Dr. F. B. Harrington, of Steubenville, Ohio, and Dr. W. P. Sammons, of Wheeling.

D. E. GREENELTCH, M. D.,
Secretary.

* * * *

HARRISON

Dr. W. H. Allman, of Clarksburg, secretary of the Harrison County Medical Society, was elected president for 1948 at a dinner meeting held December 4 at the Stonewall Jackson Hotel, in Clarksburg. Other officers were elected as follows: Vice president, R. T. Humphries; secretary, J. F. McCuskey; treasurer, C. O. Post; delegates to the annual meeting of the State Medical Association's House of Delegates, H. V. Thomas, L. E. Neal, and C. O. Post; alternates, S. S. Hall, D. H. Lough, J. E. Wilson, Jr., and J. F. McCuskey; and board of directors, W. H. Allman, R. T. Humphries, J. F. McCuskey, C. O. Post, T. V. Gocke, B. W. Wilkinson, and J. E. Wilson, Jr.

W. H. ALLMAN, M. D.,
Secretary.

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KANAWHA

Dr. Theodore G. Klumpp, president of Winthrop-Stearns, Inc., New York City, spoke on the subject of "New Horizons for Old Age" at the regular monthly meeting of the Kanawha Medical Society, held December 9 at the Daniel Boone Hotel in Charleston.

At the business meeting held following the scientific program, the following doctors were elected to membership in the Society: Elmer Gearhart, St. Albans, and J. Edwin Stoeckel and George F. Grisinger, Jr., Charleston.

THEODORE P. MANTZ., M. D.,
Secretary.

* * * *

MERCER

"Accessible Tumors—Their Diagnosis and Prognosis" was the subject chosen by Dr. Ester Marting, of the University of Cincinnati, for his address before the Mercer County Medical Society, at the regular monthly meeting held November 20 at the Hotel West Virginian, in Bluefield.

The paper was discussed by Drs. Wade H. St. Clair, Hampton St. Clair, J. E. Blaydes, Robert Gatherum, D. V. Kechele, and H. G. Steele.

FRANK J. HOLROYD, M. D.,
Secretary.

MONONGALIA

Dr. John H. Trotter, of Morgantown, was elected president of the Monongalia County Medical Society at the regular monthly meeting held December 2, in Morgantown. Other officers were elected as follows: Vice president, Dr. Merle Warman; secretary, Dr. Clark K. Sleeth; and treasurer, Dr. George W. Phillips.

Dr. M. L. Hobbs was accepted as a member of the society by transfer from Marion County. Dr. Brady Randolph, Jr., of Morgantown, was elected to membership. The membership of Dr. Olin T. Coffield was transferred to the Ohio County Medical Society.

CLARK K. SLEETH, M. D.,
Secretary.

* * * *

POTOMAC VALLEY

Dr. Samuel Berkman, of Frederick, Maryland, was the guest speaker at the regular monthly meeting of the Potomac Valley Medical Society, held December 10 at the Old Homestead Hotel, at Burlington. His subject was "Recent Advances in Our Knowledge of the Antibiotics."

E. A. COURRIER, M. D.,
Secretary.

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Announces the opening of a new addition especially equipped to treat acute poliomyelitis in all its forms. This new addition includes twelve private rooms.

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"Therapeutic efforts toward the relief of constipation in patients with an irritable bowel syndrome must be continued over prolonged periods of time. Cathartics which exert their action by direct irrigation of the intestinal mucosa have no place in long-term bowel management. . . . The most satisfactory results were obtained with a hydrophilic mucilloid [Metamucil] prepared from psyllium seed. . . ."*

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*Dolkart, R. E.; Dentler, M., and Barrow, L. L.: The Effect of Various Types of Therapy in the Management of the Irritable Bowel Syndrome, Illinois M. J. *90*:287 (Nov.) 1946.

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Woman's Auxiliary

BARBOUR-RANDOLPH-TUCKER

Mrs. Eva Carnes, of Belington, was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Barbour-Randolph-Tucker medical society, held December 4, in the Masonic Hall at Belington. Her subject was, "Pioneer Doctors of West Virginia," and her discussion of West Virginia folk lore was most interesting.

Some of the members of the Auxiliary are now doing research work on pioneer doctors, particularly those who were located in this part of the state.

MRS. W. E. WHITESIDE,
Secretary.

* * * *

CABELL

Dr. Ray M. Bobbitt, of Huntington, discussed medical legislation at the regular monthly luncheon meeting of the Woman's Auxiliary to the Cabell County Medical Society, held November 11, in the Crystal Room at the Hotel Frederick.

A substantial contribution was made to funds which will be used to provide Christmas baskets for distribution at the Eighteenth Street Mission.

Announcement was made that, through the cooperation of the management of the Palace Theatre in Huntington, at least 40 children from the Stella Fuller Settlement will be admitted to the theatre once a month, without charge, to see an approved motion picture. Chaperones will be provided by the Auxiliary.

MRS. GATES J. WAYBURN,
Publicity Chairman.

* * * *

HARRISON

Mr. Charles Lively, executive secretary of the West Virginia State Medical Association, was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Harrison County Medical Society, held December 4, at the Waldo Hotel in Clarksburg. His subject was, "Eyes on Washington—What to Expect in 1948."

Mrs. James C. Repass, of Lumberport, the president, presided at the meeting which was attended by 26 members and guests.

MRS. JACK T. GOCKE,
Secretary.

* * * *

OHIO

Mr. Richard Creighton, of the local Family Service Association, was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Ohio

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County Medical Society, held in the Continental Room, at the McLure Hotel, in Wheeling, November 18. His subject was, "How Can We Aid the Family Service Association?"

The Auxiliary will sponsor a Christmas party, December 22, for the children at the Woodsdale Children's Home.

MRS. C. S. BICKEL,
Secretary.

PG COURSE IN DISEASES OF CHEST

The American College of Chest Physicians, Pennsylvania Chapter, and the Laennec Society of Philadelphia are sponsoring a postgraduate course in diseases of the chest to be held during the week of March 15-20, 1948, at the Warwick Hotel, Philadelphia, Pennsylvania.

The emphasis in this course will be placed on the newer developments in all aspects of diagnosis and treatment.

The course will be limited to 30 physicians. Tuition fee is $50.00 for members, and $90.00 for non-members.

Further information may be secured at the office of the American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

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Correspondence

Arthur C. Chandler, M. D.
1119 Virginia Street
Charleston 1, West Virginia

December 13, 1947

Mr. Charles Lively, Executive Secretary
West Virginia State Medical Association
Charleston, West Virginia

Dear Mr. Lively:

Recently, the eyes of a girl were removed immediately after death and sent to the Eye Bank for Sight Restoration, Inc., in New York City. The girl had requested that this be done and her family carried out her wishes. The corneas were used by surgeons within a few hours and, it is hoped, with good results.

Now that new airports have opened up, notably the Kanawha Airport in Charleston, and schedules have been improved, we should begin active cooperation with the Eye Bank. The personnel of the major air lines and the Red Cross will transport an eye from any accessible spot in West Virginia to the Eye Bank within a matter of hours. In turn, if an eye is needed for the operation of corneal grafting in West Virginia, it may be obtained from the Bank. It must be remembered that the demand far exceeds the supply and any patient must wait his turn.

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J. ROSS HUNTER, M. D., F. A. C. S., Director

One does not will his eyes, but rather makes known his wishes to his nearest relatives, or friends in the absence of relatives, who promptly notify the surgeon at the proper time. Eyes removed because of some condition not involving the cornea, such as intraocular tumor or those of still-born children, can be used. The eye must be removed under aseptic technique as required in any surgical procedure.

Corneal grafting is done most successfully in those cases with central scarring more or less surrounded by clear cornea. The opacities may be due to thermal, mechanical, chemical or infectious agents. Some dystrophies, but not that of Fuchs, are included. Old cases of interstital keratitis, even though there is some vascularization, are particularly suitable for transplantation. Generally, vascularzation of the opacity is undesirable, for it lessens the chances of obtaining a permanently clear graft. Keratoconus is probably the best indication for corneal transplantation where scarring has progressed to the point that contact lenses will no longer afford adequate vision.

Any surgeon desiring to participate in this undertaking, may obtain detailed information by writing to the Eye Bank For Sight Restoration, Inc. at 210 East 64th Street, New York 21, New York. Those in Charleston and vicinity, if they prefer, may contact the writer.

Very sincerely yours,
(Signed) A. C. Chandler, M. D.

CONFERENCE ON CEREBRAL PALSY

At the first conference of its kind, specialists working with children with cerebral palsy—"spastics"—met at the U. S. Children's Bureau, Federal Security Agency, March 26-28, to pool their experience preparatory to a major effort by the bureau and state crippled children's agencies to get help to these children.

This contemplated expansion of services to children with cerebral palsy is in line with a general expansion of services to crippled children made possible through increased federal funds authorized last August under amendments to the Social Security Act.

The bureau estimates that there are 175,000 children with cerebral palsy in the country, and state agencies responsible for administration of programs approved by the Children's Bureau now have on their lists the names of more than 40,000 such children. At present there are relatively few centers in the country giving specialized care.

Major recommendations of the conference look toward a long-range program under federal-state auspices and are directed toward the following goals: (1) to find the children and get them under care as early as possible; (2) to provide the best medical care and treatment, and to train specialists in the field and at the same time spread a knowledge of cerebral palsy among all professional groups working with these children; (3) to bring these children to adult life as self-supporting or partially self-supporting individuals; (4) to develop each child's potentialities for the fullest possible enjoyment of life, through education and cultural advantages; (5) to educate parents of cerebral palsied children to a more understanding attitude.—J. Kansas Med. Soc.

DIABETES MELLITUS

Diabetes Mellitus has been called the neglected disease. Twenty-five years since Banting wrought the miracle of insulin, diabetics still needlessly die in coma, suffer gangreme amputations, and develop degenerative complications of the disease. And this happens because of neglect of diet, neglect of insulin and neglect to maintain the proper controls for the successful handling of the case.

Joslin estimates that at least a million people have diabetes in this country today. In 1900 it was 27th as a cause of death and now it is 8th. We have drives against tuberculosis, poliomyelitis, venereal disease and cancer. But diabetes seems to be forgotten, though we have a million people afflicted with it. We should make the people more aware of its symptoms and the physician more diabetic conscious and alert to the diagnosis of the disease.

Robbins and Tucker studied the cause of death in 307 diabetics and 2,800 non-diabetics. The most frequent cause of death in the diabetic group was pulmonary infection; cardiac decompensation and coronary occlusion follow. In the controls, pulmonary infection also was first, with carcinoma second and cardiac decompensation third. The diabetics had a significant increase over the non-diabetics in coronary occlusion, peripheral vascular disease, acute pyelonephritis, and infection of the extremities, and a significant decrease in cancer. The average age of diabetics at death was 59.6 years, and for the non-diabetics 59.8 years.

"An ounce of prevention is worth a pound of cure." Relatives of diabetics should not allow their weight to go above the normal standard. Anyone 30 years old or above and 30 pounds overweight should be given a glucose tolerance test. Relatives of diabetics should avoid overeating, overindulgence in carbohydrates or carbohydrate sprees, low carbohydrate diets, infections and unusual stresses and strains, physically and mentally. A diabetic should not marry a diabetic or a carrier. Fortunately diabetes has a Mendelian recessive characteristic.—Carlisle Morse, M. D., in Kentucky Medical Journal.

MEDICINE AND THE SEX OFFENDER

Four states (California, Illinois, Michigan and Minnesota) have already enacted laws, now in effect for nearly a decade, and all sustained as constitutional, defining a type of mental disorder short of "insanity" which they dominate "criminal sexual psychopathy", or by some similar name (the laws are, of course, not identical). This condition is not a defense to the charge of crime; if it exists, however, it permits commitment to a special institution. If the defendant is found to fall in this category, he is given an opportunity for psychiatric treatment, and if he responds, he is then returned to stand trial or be otherwise disposed of by the prosecutor; if he does not respond, society is protected by his prolonged detention, just as if he were found to be "insane."—W. O. in Medical Annals of the District of Columbia.

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EVALUATING LOBOTOMY

The result of the acquisition of new knowledge—as an aftermath of the war—progress and interest in the field of mental diseases has been amazingly beneficial to the medical practitioner, as well as those he serves.

The recent advances in psychiatry and the study of the patient as a person has occupied the minds of the profession. Both neurologists and others have given serious study to the functions of the frontal lobe of the brain. As a result, there has appeared in the field of psychosurgery, lobotomy.

Comparatively speaking, lobotomy is a simple surgical procedure introduced to the profession by Dr. Egas Moniz, Professor of Neurology at the University of Lisbon, Portugal. This bit of creative and inspired brain surgery has the objective of interrupting the frontal association pathways of the intact brain for the relief of certain psychotic symptoms with special emphasis on schizophrenias. The operation severs quadrants in the prefrontal lobes of the brain. After this transection of the nerve pathways two psychopathological postoperative changes occur: regressive and reintegrative phenomena with so called emotional rechannelling. This rechannelling requires re-training and re-education of the patient.

Clinical reports seem to indicate that in well-selected patients subjected to lobotomy, the duration of mental illness is greatly shortened and symptomatic improvement ultimately occurs in a large percentage of long-standing and chronic cases.

As a result of this research contribution to psychosurgery, new therapeutic developments are reported in the results obtained—in otherwise hopeless psychotics. —New York Medicine.

PROGRESS IN INDUSTRIAL MEDICINE

Although industrial medicine has been recognized for centuries it was not until the state compensation laws imposed financial hardships on industries that doctors became a necessity. Industry very soon realized that their operation costs and profits were seriously influenced by loss of manpower resulting from injuries. From a compensation standpoint, two things had to be done to remain in business. First, to provide adequate treatment to the injured; secondly, (and much more important than the first from a cost standpoint), the reduction and possible prevention of all accidents. This program required assistance from two professions, namely, doctors and engineers.—C. F. Yeager, M. D., in Rhode Island Medical Journal.

RESEARCH IN LEUKEMIA

Much research is under way on the cause and treatment of leukemia. One new technic, involving injection in the blood of phosphorus which has been made radioactive, has been, in certain cases, helpful in reducing the total white blood cell count and in improving the condition of the bone marrow. In many cases temporary help is given through blood transfusions, x-ray irradiation of the spleen and certain arsenic preparations taken by mouth. Colchicine is used with some benefit in prolonging the life of the patient.

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X-rays, however, cannot always be used, particularly in persons with acute leukemia.

The disease is practically always fatal, and treatment at present does little more than stave off the end and keep the patient comfortable. Thus it is for conditions such as leukemia, the causes and treatment of which are not known, that research must continue. Among the groups sponsoring a splendid program of research through animal experimentation is the National Society for Medical Research, members of which are now carrying on research in various medical schools and laboratories throughout the country.—Health Talk, Education Comm., Illinois St. Med. Soc.

INCREASE IN POLIO CRIPPLES

Poliomyelitis has attacked an unusually large number of persons in the United States in recent years. In fact, the four years from 1943 through 1946 constitute the longest period of sustained high incidence of the disease in the history of the country. In 1946 alone, there were more than 25,000 cases, a figure which was exceeded only once before—in 1916, when more than 27,000 cases were reported.

It is estimated that the number of children and young people in the United States crippled by poliomyelitis has increased about 10 percent in the past two years and almost 45 percent in the past seven years. As of January 1st of the current year, it is further estimated that there were nearly 74,000 persons under age 21 who were crippled to some degree by the disease; at the beginning of 1940 the number was in the neighborhood of 51,000. Only a small part of this rise has come about through the increase in the child population, inasmuch as a comparison of the rates of crippled survivors shows a rise from 10.6 per 10,000 at ages under 21 in 1940 to 14.4 in 1947, an increase of 36 percent.—Metropolitan Life Insurance Company's Statistical Bulletin.

THE THIRD PHASE OF MEDICAL CARE

If we, as physicians, are to meet the needs of our patients, we must know something about rehabilitation and the selective placement of the handicapped. We must interpret to our patients the findings of the specialists in words that are understandable and meaningful. The burden of explaining to the patient the nature and extent of his disability falls upon the family doctor. That explanation cannot be in medical terms of the disability alone, but must be in terms of its effect upon the vocational, social, economic, family and personal life of the patient.

We, as physicians, must deal with the practical relationship of disease to economic, social and environmental factors. We must realize that treatment of disease is only a part of our problem, that we must also treat patients. We must know the science of medicine, but we must also practice the art, for upon our shoulders falls much of the responsibility for the third phase of medical care which takes the patient from the bed to the job.—Howard A. Rusk, M. D., in Westchester Medical Bulletin.

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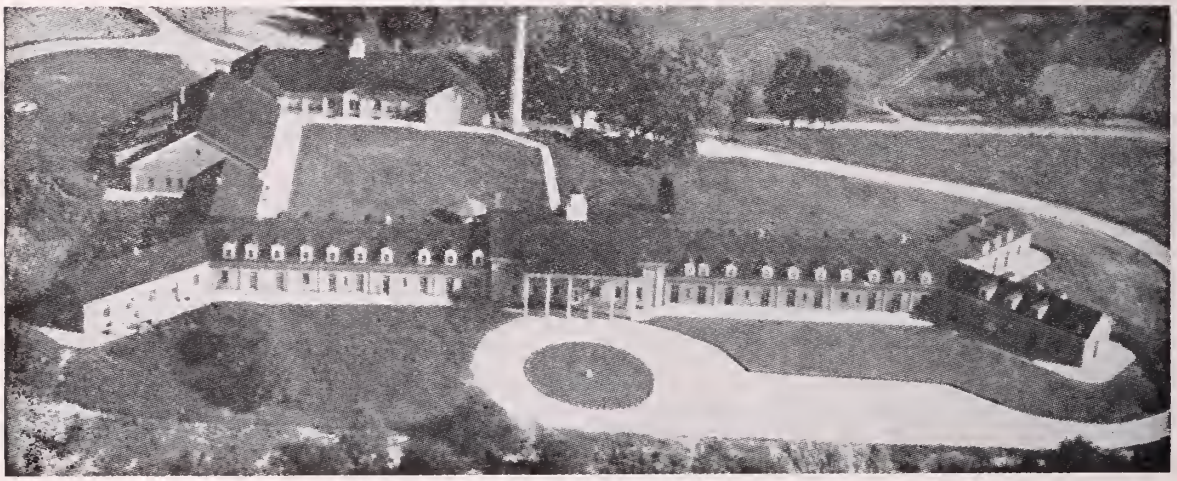

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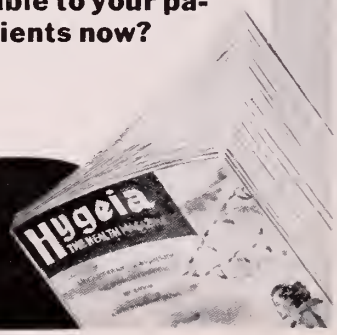

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NEW HORIZONS FOR OLD AGE*

By THEODORE G. KLUMPP, M. D.
New York, N. Y.

A century and a half ago, Horace Walpole wrote these lines: "About the time, or a little later, I die, the secret will be found of how to live forever". Feeling that enough time had passed to vouchsafe a reply, Helen Bevington answered:

"Horace, be comforted to die.
One Century has meandered by
And half the next since, it was true,
The temporal state eluded you.
Now as I read your pensive letter,
I wish myself that times were better
And I might boast how men contrive,
As you foretold, to stay alive.
By now we should possess the key
To fleshly immortality
And, if we wanted to, endeavor
To live forever and forever.
This, to my infinite regret,
Is not a custom with us yet.

I write you Horace for good cheer
Life is about as usual here."

Unfortunately, life is about as usual here so far as our knowledge of the nature of the ageing process is concerned.

In a sense we are now standing where the stream divides. For generations we have followed the branch of infectious diseases. It has dwindled in size, but we have not yet really started the exploration of that other stream that flows in the direction of the chronic diseases of adult life and geriatrics. In the past our chief endeavor was to learn to run the gauntlet of infections so that we might be able to raise a reasonable number of our children to adult life. But as a result of our success in conquering infections and some of the most deadly diseases of childhood, we now have an adult population that is larger in proportion than it has ever been before. It promises to grow even greater as the years roll by. This poses new public health problems, and hitherto neglected diseases assume compelling importance. A whole new field of knowledge is waiting to be studied and mastered. We haven't even begun to think seriously about the medical and sociologic problems of old age. Neither mericine, nor industry, nor the State, has any carefully thought out program of what to do with the vast population of older persons that is rising in our midst. Only Doctor Townsend has a $50.00 every Friday plan which most doctors feel is not the answer. But the care of the aged must not be left to the old man with the long white beard and the scythe.

Our research has not scratched the surface of such conditions as heart disease and coronary thrombosis, apoplexy, nephritis, arthritis, and cancer which are only a few of the cheerful prospects of advancing years. By way of orientation, I might mention that the diseases of the heart and blood vessels kill three times as many as cancer, six times as many as accidents, eight times as many as pneumonia, eleven times as many as tuberculosis and at least five hundred times as many as infantile paralysis. That is not to say that these conditions are not serious but I want you to have no doubt as to what is public enemy number one. Aside from the damage caused by acute rheumatic fever, the least common denominator of these diseases is hardening of the arteries, or arteriosclerosis. We have

*Presented before the Kanawha Medical Society, at Charleston, West Virginia, December 9, 1947.

learned to detect the obvious structural end results of this condition but, unfortunately, we have learned practically nothing about the functional chemistry that leads to it. Recently, Dr. William Dock revived the old theory of Leary of Boston that cholesterol, a normal constituent of butter, eggs, cream and other fatty foods, when present in excessive amounts in the blood, leads to hardening of the arteries and its major appalling consequences: coronary thrombosis and apoplexy. While Leary and Dock's intriguing theory is still a long way from being proved, there are a number of interesting facts to support it. If their convictions should ultimately turn out to be correct it will mark one of the greatest medical discoveries of the twentieth century. Let's hope that we know the answer before it is too late for you and me.

Some indication of the increasing importance of the problems to which I have alluded may be gained from figures on the percentage of our population in the older age groups. According to U. S. Census figures and reliable estimates with respect to the future, the proportion of our population 45 years of age and over appears as follows: (These figures do not take into account the possibility of future dramatic medical discoveries that might further change the longevity picture.)

1860	13.1%
1880	16. %
1900	17.8%
1920	20.8%
1940	26.5%
1960	33.3%
1980	40.3%

When we consider those 65 years and over, the following percentage distribution is reflected:

1860	2.7%
1880	3.4%
1900	4.1%
1920	4.7%
1940	6.8%
1960	10.0%
1980	14.4%

The important facts to be derived from these data are that the weight of our population is shifting toward the older group and by 1980 two-fifths of our population will be over 45, and one-seventh over 65. At the same time the total number of persons also is increasing. It has been conservatively estimated that we will have not less than 150 million people by 1980. This means that by that time there will be not less than 60 million 45 years and over and over 21 million 65 and over. Think of it! Twenty-one million people 65 and over! These figures have special significance in the light of the all-time employment record of almost 60 million gainfully employed which has just been attained, and this means that in less than 33 years we shall have more individuals over 45 years of age than the total number employed at the present time. If we do nothing about it and maintain present day working standards and conditions we shall have a potential labor surplus of over 30 million workers by 1980. But we must anticipate the continued introduction of new labor saving devices perhaps on a scale never dreamed of before. The technologies recently developed, particularly in electronics, and the upswing of interest in science generally should provide for that. Despite the new industries that will result, I seriously doubt that the advances in science will have the net effect of increasing man-hours of available work. It certainly hasn't in the past.

What to do about the aged and the partially disabled? We can't plow them under as we used to plow under corn, potatoes, tobacco, and little pigs in accord with Henry Wallace's advice. And I am equally certain that we can't just turn them out to pasture and expect them to enjoy life. People are not happy when they are idle, and this is particularly true of older individuals. Youth can loaf content with opiate dreams of future achievements. But as we grow older the realities of life are more clearly seen and less easily denied, and as we approach 50 and 60 we can no longer derive solace from the pipe dreams of future achievements. Similarly, the diversion of participation in sport and exercise is denied us. Age plays for real stakes, not pastime. It wants something to do and it must be real. And the most real thing we have to sustain us in this life of ours is useful work. Have you seen, as I have, a faithful employee who has been working at his job for twenty, thirty, forty years and who wants to continue? Have you seen such an employee "retired" to the boneyard by some blind, compulsory retirement scheme? There is an unutterable sadness about it that sometimes makes me think it would be kinder to shoot the old fellow. I believe I understand why so often they die shortly after retirement. Any biologic organism that has been accustomed to a set routine for forty or fifty years can't suddenly be shaken from its orbit without untoward consequences. Anyone who has studied Cannon's ideas on homeostasis will recognize this. It is a biologic fact that functions and living tissues that are not used decline and atrophy. Applied to longevity I believe it is true also that nature tends to elimi-

nate those who have relinquished their functional usefulness.

In considering the problems of longevity we might ask ourselves, "When are we old?" To a child of 7, an adult seems ancient at 30. According to a Frenchman, 40 is the old age of youth, and 50 the youth of old age. Most people, as they grow older, cling to life with a desperate grasp, thrusting the period of old age ahead of them so that they always view it as a time of life not yet reached. By the very young, old age is considered as beginning when the hair turns gray, the shoulders stoop, the skin loses its smoothness, and physical agility, speed, and endurance have perceptibly diminished. Sometimes these things are not as annoying as some of the more exquisite aspects of growing old, as reflected in the following lines:

SO THIS IS MIDDLE AGE!

It's not the thickened midriff that I mind,
The shortened breath which says three sets of doubles
Will be enough (it is enough I find);
Shortcomings yes, but oh, such minor troubles
Compared with youth's smug deference polite
Which types one as a hoary oracle
To answer questions deep into the night
About events which youth regards historical.
You'd think that Coy or Brickley or Mahan
Were Hannibal, Ulysses, or Balboa;
While Dempsey, Tunney, and that Firpo man
Had boxed the compass with old skipper Noah;
The feline Lenglen and the pig-tailed Wills,
Whom only yesterday I saw do battle,
To youth, alas, seem older than the hills —
Skeletons the youngsters love to rattle.

Remind me, kids, when next you stop for tea,
I'll tell you what I heard Grant say to Lee!

From a strictly scientific point of view the ageing process begins at conception. The very instant that cells, tissues or organs stop growing they begin to decline. This decline marks the beginning of old age. It starts slowly but it begins early in life. The thing popularly called old age is in truth only that period in which the rate of decline has become accelerated and the manifestations so gross that they are visible to the naked eye. It is true that different races of man and different species of animals decline at varying rates. What the responsible factors are we really don't know despite the following intriguing suggestion:

The horse and mule live thirty years,
And nothing know of wine or beers.
The goat and sheep at twenty die
And never taste of Scotch or Rye.

The cow drinks water by the ton,
And at eighteen is mostly done.
The dog at fifteen cashes in
Without the aid of rum or gin.

The cat in milk and water soaks
And after twelve short years it croaks —
The modest, sober, bone-dry hen
Lays eggs for nogs, then dies at ten,

All animals are strictly dry;
They sinless live and early die.
But sinful, ginful, rum-soaked men
Survive for three score years and ten.

And some of us, though mighty few,
Stay pickled 'till we're 92!!

Society has been quite illogical and inconsistent in its attitude toward the older worker. On the one hand it is apparent that we have no objection to electing and appointing older individuals to positions of the greatest responsibility in government, business, and the professions.

For instance, in the Seventy-ninth Congress thirty-two senators, or 41.3 per cent, were over 65 years of age; twelve, or 15.3 per cent, were 61 to 65 years of age. In other words, over 56 per cent were past age 60. In the House of Representatives fifty-seven members, or 21.3 per cent, were over 65 years of age, and thirty-six, or 13.4 per cent, were 61 to 65 years of age, making a total of almost 35 per cent over 60. Of 500 top business executives listed consecutively in Poor's Directory 143, or 28.6 per cent, were over 65 years of age, and 78, or 15.6 per cent, were between 61 and 65 years inclusively. Here again, over 44 per cent are over 60 years of age. I am certain that a study of the leadership of the various professions would reveal the same large proportion of individuals in the older age group.

And yet, on the other hand, as far as the rank and file of workers is concerned, we have no objection to the imposition of blind and unselective compulsory retirement rules which automatically eliminate those in the ranks who have reached the same age regardless of their fitness, ability, and contribution to the group for which they labor. More precious than oil, or fertile soil, than ore and minerals, than trees or an equable climate, are the human resources of a country. All other things were here when Columbus came to America, but it took intelligent, industrious men to make our country what it is today. We may not fully realize it, but we cannot afford to waste the contributions of those who, through years of experience, have learned to do their jobs well and are willing and able to continue to do them faithfully. Training and experience can be replaced only by training and experience and when we retire a competent older worker his successor has the burden, inevitably, of supporting him as well as himself. Some individuals welcome retirement and the possibility of voluntary retirement on a pension should always re-

main open for such. But, if the premise be that all individuals over 65 or 70 are not worth their keep, then least of all should we permit individuals above those ages to occupy the top and critical positions in our social structure. If we acknowledge, as we do, that some of these are fit and pulling their weight at those ages, then we should use our intelligence in devising methods of determining who among *all* workers are fit. As the great physiologist, A. J. Carlson, stated, "The physiologic age of the worker is not synonymous with his chronologic age, owing to the individual variables in heredity, mode of living, accidents and sequelae of disease". Likewise, "All age changes come on gradually" according to Carlson, and we know that in some individuals changes characteristic of senescence begin even in childhood. And, biologically, all of us start to grow old the moment we stop growing. That such changes may proceed very gradually is illustrated by the fascinating and possibly authentic story of Christen Jacobsen Dragenberg reported in the Journal of the Institute of Actuaries. Dragenberg was a Dane who lived to be 146 years of age from 1626 to 1772. He went to sea when he was 13, took part in the wars of three kings against Sweden, served many nations in merchant navies, when nearly 70 was taken prisoner by Algerian pirates, was sold as a slave, escaped slavery after fifteen years, and at 84 again went to war against Sweden. At age 111 he married a woman of 60, outlived her, proposed at age 130 to several women but was rejected. Mastering his disappointment, he lived on for sixteen years. Described as being of impetuous temperament, he lived a life far from blameless, but in his last five years, from age 141 to 146, exhibited a conduct "quite respectable". If one man can live a life as full as this there is no reason why science cannot make it possible eventually for many more of us to marry at age 111, propose and *be accepted* at 130, and live to 146.

We choose and select when we hire, and I see no reason why we can't do the same thing when we retire our workers. In 1930 on the basis of a compulsory retirement rule, the most distinguished neurologic surgeon the world has yet known, Harvey Cushing, was retired from the Harvard faculty at a time when he had useful years ahead of him. He promptly accepted a full time academic appointment at Yale where he continued his outstanding contributions to medical science. What was Harvard's loss was Yale's gain, but to Doctor Cushing the retirement rule meant only the waste of time and inconvenience of pulling up stakes, moving, and finding a new home. One of the best teachers it has been my privilege to know, and an outstanding figure in public health work, Dr. Milton J. Rosenau, was retired from the same faculty. He too moved to another university where the rules were not so blind and where perhaps they could not afford the luxury of scrapping their best brains by the calendar. He continued his inspiring teaching which I can assure you could be emulated by very few others in the entire world, and was subsequently elected president of the American Public Health Association. The story is told that as he lay on his death bed last year, he cocked open one eye as he had a habit of doing, saw the pretty nurse standing before him and spoke his last words: "I feel I am taking a turn for the nurse." From a sociologic standpoint inflexible chronologic retirement rules are ridiculous and a reflection on the state of our intelligence in solving what ought to be a simple problem. Whenever society adopts a rule that eliminates the fit with the unfit, destroys the good with the bad, or punishes the innocent with the wicked, it is not a good rule. Society progresses by changing rules of this kind. In an imperfect society human beings are pushed around as a faceless mob. But social progress may be measured in the last analysis by the degree of skill and discrimination with which society solves the individual problems of its members.

The argument has been advanced that we must clear out the older workers to make room for the younger men so that their progress upward in an organization will not be unduly stymied. On the face of it this line of reasoning appears to have some merit. But it is only another way of stating that there are more workers than there are jobs. During the war when there was a manpower shortage, no one was afraid that the old, the lame, the blind, and the halt, were taking jobs away from younger and more able workers. At other times similar arguments have been applied against the employment of women in business, government, and the professions. Certainly there is no arbitrary age at which older workers begin to repress the advancement of younger individuals. In a sense, every older individual higher on the ladder of advancement, whether he be 65 or 55 or 45, is holding a job that a younger individual aspires to and feels he can fill. That is always true and it will be just as true if we force everyone to retire at 50 or even 45 as we will have to do by 1980 if we don't find a more logical way of reducing the disparity between jobs and workers. We must not lose sight of the fact that someone must support those that we retire to idleness. The more workers we retire, and particularly if we should lower the re-

tirement ages, the greater will be the economic burden which will be placed on those who work. They will have to produce enough to support themselves and their families as well as the increased numbers of those who become emeritus workers. The whole problem lies in the adjustment of the number of workers to the number of jobs available. To attempt to strike a balance by eliminating all workers over a certain age is an unfair penalty on age and experience. In a refined and delicate way it is a perpetuation of the jungle law of the fang and claw where the leaders of the pack survive only until the younger beasts grow fierce enough to eliminate them. In modern civilization we are less violent but the end result is approximately the same.

One of the most important steps in solving this problem is by successive reduction in working hours for all workers rather than by reducing more and more older workers to a state of parasitism. I venture to say that you and I will live to see a thirty hour week in industry.

Another view that is widely held is that older individuals become over-conservative, and to make progress we must eliminate these obstacles in the path of progress. Here again there are such wide variations in human reaction patterns that I don't see how one can logically draw generalizations that will fit individual cases. Certainly Bernard Baruch, 77 years of age, Serge Koussevitsky, age 73, Arturo Toscanini, age 80, Herbert Hoover at 73, and Secretary of State Marshall at 68, are no obstacles in the path of progress, nor have Senator Pepper, Henry Wallace, and Tommy Manville become more conservative as they have grown older. As far as the working masses now subject to compulsory retirement are concerned, it makes no difference at all whether an individual grows more or less conservative. If individuals in key positions become too conservative with age or even too reckless, as they sometimes do, a retirement board, operating on a selective basis, can function to correct this development, as well as any others that may arise.

During the past decade industry and our federal and state governments have made great advances in providing for the care of the aged. What we have accomplished is only a start and much more remains to be done. I am hopeful that the major burden of this can be carried by the extension of voluntary retirement plans in which the employer and the employee share the cost. Not only must more realistic retirement benefits be provided, but such plans must be more widely adopted by employers generally. The problem of transferring retirement benefits without loss when an employee moves from one job to another remains to be solved. Under present day practices a worker who changes jobs from one organization to another to advance himself, or for any other reason, is penalized by loss of the portion of his retirement accumulation which the employer contributes. For those not covered by adequate voluntary retirement programs, the present token social security benefits must be increased, and old age assistance on a lower scale provided for those who, for one reason or another, have failed to earn their share of the retirement burden.

Through workers' compensation and health, accident and disability insurance we have also taken important steps in caring for those who are chronically ill and partially or totally disabled. Here again we have made only a start. There is room for improvement not only in the provisions made for the economic care of these unfortunates, but also in the medical and institutional care made available. We can understand why general hospitals wish to avoid having their beds filled with "chronics", but we will need an ever increasing number of institutions devoted solely to these cases.

While social advances in the direction I have indicated will cost money, there is no contribution we can make to human welfare and happiness that is of greater fundamental importance. Compared with the tax burden of war and armaments, which human ingenuity should be capable of eliminating, it is negligible. Even this tax burden can be lessened by permitting capable and willing older workers to continue working, and finding more places in industry and government for those partially disabled. If we will employ 1/5 of the 21 millions over 65 years of age which we will have by 1980, at, let us say, an average of $2,500 per annum it will mean 10 billion, 500 million dollars (10,500,000,000.) per year that they will earn for themselves and which load of support largely will be taken off the shoulders of other younger workers, whether by taxes or direct contributions.

As we progress to a more perfect civilization, the goal of which is nothing more than a greater measure of happiness for all mankind, there is much that remains to be done for those that are aged and chronically ill.

This paper has only one purpose: to emphasize the growing importance of the problem of the aged and chronically ill. It is a plea for the devotion of more thought, more research, and more funds to improve the lot of the largest and

most neglected group of unfortunates in our society. It is from those interested in medicine and public health that we may expect leadership in this endeavor.

Old age is not a disease but the disabilities arising from it are. As we overcome these we not only postpone old age but we defeat the suffering and sorrow that come with it. Death has its final victory but it can come in peace. I like Llewelyn Powy's twist, "We sail in leaky bottoms and on great and perilous waters. Old and young we are on our last cruise. If there is a fill of tobacco among the crew, for God's sake pass it around, and let us have a pipeful before we go!"

WHY PEEL?

After declaring that "it is essential to eliminate to the maximum practicable extent the wastage that occurs in the peeling and preparation of potatoes in the kitchen," the Minister of Education tells local education authorities in an Administrative Memorandum how to peel potatoes.

The Minister asks them to give strict instructions that potatoes should receive the briefest treatment in electric peeling machines "consistent with rendering them palatable," and that hand peeling and "eyeing" should be done with special care—indeed, the latter may be omitted if doing so does not cause potatoes to be wasted in the diningroom. The Memorandum adds that potatoes baked in their skins should be served as often as possible and experiments conducted with potatoes steamed in their skins.

The proportion of potato removed by peeling has been estimated as between 3 and 25%, an average being 14 to 16%, and these peelings, of course, include part of the tuber's cortical layer. Moreover, potatoes boiled in their skins lose far less nutritive matter than peeled potatoes cooked in that way, and while there is a food shortage it is illogical to destroy a barrier that is "so resistant to high temperatures, and so absolutely impermeable." Education authorities should try to persuade children to eat unpeeled potatoes.—British Medical Journal.

NEED FOR ACCURATE RECORDS

Where a doctor treats a patient who has sustained an injury resulting from an accident, in addition to making a correct diagnosis and instituting proper treatment, the doctor must keep such records as will permit him at a future date to give accurate testimony and express an opinion as to whether or not the accident was the competent and producing cause of the patient's condition and also as to the exact nature and extent of the injuries sustained.

The importance of maintaing accurate records and the factual detail therein revealed cannot be overstressed, as any doctor will sadly state, who has acted as a witness without having such data available in proper form.—Ed. T. Welch in New York Medicine.

SCHOOL HEALTH

By N. H. DYER, M. D., State Health Commissioner
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Health is a primary goal of our modern educational system. In 1918 the Commission on Reorganization of Secondary Education named health as the first of seven objectives of education. The Educational Policies Commission recently stated, "An educated person knows the basic facts concerning health and disease—works to improve his own health and that of his dependents—and works to improve community health."

Public health has been defined by Winslow as the art and science of preventing disease, prolonging life and the promotion of physical and mental efficiency through organized community effort. In this definition I would like to stress the importance of the phrase, "through organized community effort". This is the keynote of all health programs and applies particularly to school health programs.

School health is one of the most important activities of a local public health service. We regret that today in many of the communities of our state we do not have organized local public health service. These are the communities in which it is very important that the schools take the lead in organizing and promoting good school health programs, and to cooperate fully in community health activities. In the promotion of school health, we are dealing with children as individuals at an age when it is easier to establish good health habits. The teachers and school authorities are trained for this health education, and they are vitally interested in the health and welfare of their pupils.

The purposes of a school health service should be:

1. To teach the child the rudiments of personal and community hygiene in order that good health habits may be established. This influence will be continuous in the maintenance of good health in later life.

2. To protect the child from acquiring disease from contact with other pupils.

3. To detect actual disease and any physical or mental defects that may interfere with the child's normal development and progress in school and during his entire subsequent life. Physical or mental defects should be corrected when possible by follow-up programs.

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THE NEED FOR DEFINITE POLICIES

Each school should formulate and apply health policies that fit in with the best thought and practice in that community for better health. Such policies should recognize the total health needs of the child for his entire life. The particular individual needs of the child must be understood. Policies should be free from any fads or prejudices. They should grow out of careful planning and successful experience; should be guided by good judgment; conform with, and help direct, the policies of the community which the school has been established to serve.

School health policies should be flexible and workable, and preferably should be in written form. These policies should assure pupils of healthful school living conditions; of appropriate health and safety instruction by health education; of adequate health protection and improvement services; of healthful physical education; of teachers and other school personnel having preservice preparation and inservice training, in order that they may be well qualified to meet their special health responsibilities.

COOPERATION IS NEEDED

Cooperation is the key word in attaining the desired goals of individual and community health. The schools alone cannot do the job. Fortunately, health departments, private physicians, dentists, nurses, teachers' colleges for special preparation and training of personnel, social and welfare workers, and other official and voluntary agencies, all are rightfully concerned with all community health activities, and are willing to cooperate. In this manner, schools and communities can develop balanced programs and avoid overemphasis of one phase of the health program and neglect of other vital phases. Parents have the primary responsibility for the health of their child, and, of course, their cooperation is of the utmost importance.

HEALTH COUNCILS AID COOPERATION

Every school unit should have its own school health council or health committee. These councils should be organized under the authority of the principal school administrator, and with the cooperation of other community agencies, and should be charged with the responsibility for planning the entire school health program.

In a one-room school the teacher should take the initiative in organizing a health council, which may consist of only the teacher, a parent, and a local physician or a nurse.

In a large high school the principal should head the council, which might properly include the following:

1. Physician (possibly the school physician)
2. Dentist
3. Nurse (usually the school nurse)
4. Health educator (if one is available)
5. Teachers of special courses (such as physical education, biology, home economics, and representatives of classroom teachers having special interests in health problems)
6. Psychologist
7. Nutritionist (usually the food service director)
8. Head janitor
9. Dental hygienist
10. Students representing the student council or student body
11. Parents representing the parent-teachers association
12. Representatives from official or voluntary community health organizations and from the county health council

Such a council would be democratic and representative.

In addition to these individual school unit councils, every county unit should have a central health council or committee with representation from all schools and other community groups interested in health. Possibly the greatest service that the central council can render is to give counsel and leadership to each individual school council, leaving specific individual problems to be worked out on the local level. The county superintendent would steer the central council. This arrangement would offer opportunity for cooperation between the school system and the local county health department.

STANDARDS FOR SAFETY AND SANITATION

Every pupil is entitled to live healthfully while at school. This requires that school officials give careful attention to standards for preventing accidents and providing general sanitation. The teacher-pupil relationships as they influence the mental and emotional health, and the health of school personnel should be carefully studied in order to provide a healthful environment for every school. The same authority which requires pupils to attend school implies the responsibility to provide a school environment conducive to normal growth, learning, and health.

Time will not permit a detailed discussion of standards for safety and sanitation. In brief, the location of the school should be chosen with a view for space for necessary buildings and playgrounds and provision made for as good drainage as possible. The site should be accessible for small children and the surroundings should be attractive. The actual construction and mainte-

nance should be in conformity with, or superior to, standards established by law and official building and health regulations. Cooperation and consultation between the state department of education, the state department of health, architects, and experts in lighting, sound and ventilation are very essential in the construction and maintenance of a modern school building. After construction is complete maintenance of safety and sanitary conditions should be assiduously cared for. Much benefit would be derived by having a qualified person make regular inspections and file a written report of conditions with the principal, the superintendent of schools, and the health officer.

MENTAL AND EMOTIONAL HEALTH

A healthful school environment entails much attention to the child's social and emotional environment. The personality of the teacher is possibly the greatest single factor that influences the mental health of the pupil. The teacher or principal who is kind but firm, sympathetic but exacting, friendly but somewhat reserved, benefits the emotional health of children. On the contrary, the scolding, sarcastic, nagging, emotionally unstable teacher or principal will certainly seriously endanger the emotional stability of the child. Individual pupil personality is of greater importance than the rigid enforcement of arbitrary rules. Types of examinations and methods of promotion should encourage each pupil to do his best.

SCHOOL PERSONNEL

Children should not be in contact with sick adults. The school personnel should have adequate health supervision and guidance. Any teacher or other employee whose health condition may be detrimental to pupils or fellow employees should be excluded from school until the condition is no longer hazardous. All employees should have periodic health examinations, including annual chest x-ray.

FOOD SERVICE

Food service should be established on the basis of the particular need of the individual school. Good nutrition should be the prime consideration and profit making should be discouraged. The school lunch program should be carefully supervised, and all health educational opportunities should be used. It is a good opportunity to develop good eating habits in all the children, and improve the appreciation of the normal social contact of eating together. The lunch room should be large enough to accommodate the pupils with pleasant surroundings. The food must be stored under refrigeration and cooked and served in a sanitary manner. The food handlers should be given special training with periodic health examinations, and constant observation in order to detect respiratory or skin infections or disease carriers.

SCHOOL HEALTH INSTRUCTION

Actual health instruction is primarily the teachers' responsibility. The teachers should be pupil-minded, centering their attention on the health needs of the individual child. At the elementary level health instruction should consist largely of helping pupils to develop good personal health habits, and correct attitudes toward healthful living. At the secondary level health teaching becomes more complicated. Here we have departmentalization of instruction. The home room and class room teachers should assume the responsibility for constant health supervision of the pupils assigned to their care. The school health council at the secondary level can give valuable assistance in coordinating health instruction with related subjects.

SERVICES FOR SCHOOL HEALTH

Specific health services should be conducted at the schools for the health protection of pupils and other personnel. These include the care of emergencies, the prevention and control of communicable diseases, and general health information.

Every school should have a definite, planned, preferably written, program for the care of emergencies, whether injury or sudden sickness. The school's responsibility is to give immediate first-aid care, notify the child's parents, see that the child is taken home, then guide the parents if need be to sources of treatment.

One teacher, or other person, trained in first-aid should be present at the school at all times when the children are there. If that school has a full-time nurse service, she should be responsible for the first-aid. In case of serious accidents or other emergencies the school physician or the family physician should be called. Teachers and other personnel giving first aid should never diagnose, and never give medication of any kind except as prescribed by a physician.

The school's policies for the prevention and control of communicable disease should follow as closely as possible recent and authoritative public health practices. Rapid progress in medical and public health knowledge may change previous recommendations with respect to specific diseases. Many communicable disease cases are detected while the child is at school, and this presents a real problem. The school's opportunity is to cooperate with health authorities and other

community agencies in a program of parent and adult health education in order that these diseases may be prevented, or at least detected, before the child comes to school. Parents should be encouraged to have their children immunized as a preventive measure, and see that only well children come to school. Morning inspections by the teacher are important, but constant daily observation is of more value in the detection of incipient communicable disease. Every teacher should know the signs and symptoms of beginning illness, and when her suspicion is aroused the pupil should be referred to the nurse or physician. Community control of communicable diseases is the responsibility of the public health officer and staff. Wherever a local health department is functioning the school should solicit its advice and recommendations when needed. If the community lacks public health services, local physicians or county medical societies should be asked for guidance. The state department of health is ready to help.

The question, "should schools remain open or closed during epidemics?" has been argued by school administrators and health departments. As a general rule the modern policy is to keep schools open in communities having well organized public health facilities, with the schools alert to regular inspections and continual observation. Sick students must be kept out of school and away from well students.

If no organized facilities are available to detect the diseased children and keep them out of school, then the school should be closed and the children kept at home so that the closing of school will not increase opportunities for contacts with sources of infection.

HEALTH RECORDS

Each school should keep an accurate up-to-date health record of every student. This record should begin with the birth of the child. The parents should be consulted for any unusual health history pertaining to the individual child, and this information should be added to the health record at the time of beginning school. Parents should be encouraged to keep the school informed of any accidents or sickness that the child may have had during vacation, and this should be added to the health record. All health examination results should be a part of the health record. It is recommended that pupils during their school years should have a minimum of four medical examinations. One upon entering school for the first time, one in intermediate grades, one at the beginning of adolescence, and one before leaving school. Special cases may require more frequent health examinations. These examinations should be followed up carefully, with corrections made when indicated, in cooperation with parents and other agencies.

THE COMMON COLD

The common cold is a mild communicable disease with vague symptoms resembling many more serious diseases. There is no specific method of preventing or treating colds. Medical authorities agree, however, that in beginning or severe colds the child should be isolated and required to rest in bed to prevent spread to other children, and to minimize the duration and severity of the attack.

It is impracticable to exclude from school every child that shows symptoms of a cold. Emphasis should be placed on beginning and severe colds. Here again, the responsibility rests on the teacher. She should encourage the parents to keep the children away from school and at home, preferably isolated from other members of the family, when they show genuine symptoms of a beginning or severe cold. If it develops that the child has a more serious communicable disease this procedure will pay health dividends.

TUBERCULOSIS

Tuberculosis is the leading cause of death in the 15 to 25 year age group. The school has a great opportunity to aid in the control and ultimate eradication of this disease. This can be done by the education of the pupils as to the nature of this disease, and cooperation with all agencies in case finding programs. Every child should be taught the cause of tuberculosis, how it is spread, the methods available for prevention, and the community facilities available for control. Every school should have a case finding program in cooperation with the school and community councils to utilize the best known modern diagnostic measures. The school should not overlook the assistance available through the local or state department of health and other agencies devoted to tuberculosis control.

RHEUMATIC FEVER

Rheumatic fever should receive particular attention as a specific problem of school health guidance. Rheumatic fever is one of the most serious diseases with which school children may be afflicted. The after-effect on the child's heart is the most serious complication. The symptoms are often vague and may be difficult to detect. All children that give a history of rheumatic fever or show loss of weight, pallor, poor appetite, repeated colds, sore throats and muscle or joint pains should be referred to the school or family

physician for a complete medical examination. The known rheumatic child with or without heart damage should be observed carefully for signs of recurrence and should be protected from exposure to respiratory infections and sudden climatic changes. The parents of the children should be informed that the best known way of preventing permanent heart damage is adequate medical care with bed rest until all signs of illness have disappeared, then physical activity is gradually resumed during convalescence until the child reaches the limit of his individual ability.

DENTAL HEALTH

Dental health is another important specific school health problem. We all know that dental disease is widely prevalent among school children. Each school should promote programs of dental health education. Students should be motivated to go to a dentist for regular required dental care. The school in cooperation with the health councils should take the lead in promoting school and community programs for providing dental treatment to needy children. Dental care programs should provide complete dental treatment for as many of the children as possible.

HANDICAPPED CHILDREN

In any school health program provision must be made for identifying the handicapped student and the adapting of special programs to meet his need.

A handicapped child is one whose physical or mental disabilities from any cause, require special attention beyond that given to other children. Many handicaps are obvious, while others will be detected only by the teacher's careful observation aided by class room screening tests. The parents and the family physician may aid the teacher in pointing out the handicapping conditions. The determining of the nature and extent of the disability should be the responsibility of the school physician, or the family physician, or both. The principal administrator of the school should determine, after consultation with physicians and teachers, the amount and kind of special program which the mentally or physically handicapped child will require. The parents should be consulted with recommendations for proper treatment and directed to agencies where proper treatment can be obtained.

PRE-SERVICE PREPARATION AND IN-SERVICE TRAINING

The operation of a successful health program requires personnel well prepared and qualified to meet the many problems arising from continuing and changing health needs.

Specialized health personnel such as school physicians, school dentists, nurses, psychologists, and nutritionists should meet the standards set by their own professional organizations.

Colleges should give students preparing for the teaching profession an extensive program of health education. The teacher should be a healthy individual with up-to-date accurate information concerning health and healthful living. Specific personal and community health courses should be given in the colleges to prepare the prospective teacher to detect abnormality in physical, mental, and emotional health; to understand normal growth and development of children at different ages; to perform screen tests of vision and hearing; to become familiar with the importance of health counseling and working with parents and specialized health groups; to plan and conduct health instruction for various grades and special groups of students and learn the aspects of school health programs, and the required cooperation from specialists and community agencies. It would be a great advantage if the preservice training of teachers would include active participation in school health activities and supervised practice teaching in health education.

Both specialized professional health personnel and teachers should be provided with in-service training. This can best be done on a county, regional, or state basis. The summer work shops being conducted in our state are to be commended and encouraged. We should strive to obtain better professional leadership and supervision of specialized school health personnel. If teachers lack the preparation now included in teachers college courses in health education, it is necessary that they be given special attention in regard to in-service training. New developments and procedures of school health programs should be available to all teaching personnel. This information can be obtained through the colleges, local and state health departments, and through the cooperation of other health agencies, especially the Bureau of Health Education of the American Medical Association.

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50,000 CURES ANNUALLY

According to Dr. Winfred Overhelser, superintendent of St. Elizabeth's Hospital, 50,000 patients are discharged as cured each year from U. S. Mental hospitals.—R. N.

TRYPARSAMIDE OPTIC ATROPHY*

By ALBERT C. ESPOSITO, B. S., M. D.**
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The use of tryparsamide in the treatment of central nervous system syphilis is constantly attended by the threat of toxic optic nerve involvement. Because of this, the physician, and especially the ophthalmologist, must be alert to safeguard the ocular structures of syphilitic patients. Any syphilitic lesion of the eye is serious, but optic nerve involvement by the drug, whether primarily due to the disease or to the toxic manifestation, offers a great hazard to treatment.

Tryparsamide is a pentavalent arsenical and is closely related chemically to atoxyl and, like it, can produce toxic cerebral symptoms manifested by toxic involvement of the optic nerve producing atrophy. Because of this, all pateints placed on this treatment should have a detailed eye examination (including visual fields and central vision findings) both prior to and at regular intervals during the course of therapy. This is extremely important when we note that involvement of the optic nerve is noted first, objectively, as a field contraction or defect, while the central vision may remain quasi-normal (as in tryparsamide amblyopia) until only a small, say 15° or 20° field of vision remains. Further, the ophthalmoscopic picture may show no pathologic process until long after the damage has occurred.

In a series of 218 cases previously reported, we noted that toxic involvement of the optic nerve can occur not only during the first, but also during any subsequent course of the drug, and that the reaction commonly occurs between the third and seventh injection. Therefore, the fact that toxicity can occur at any time during any course of tryparsamide therapy must be kept in mind. If the fields, fundi and vision are normal prior to beginning tryparsamide therapy, then it is safe to begin this therapy. However, if the fields, fundi or vision show any involvement such as optic atrophy, contraction of the visual fields or failure of central vision, then some other therapeutic agent is to be recommended, notably, penicillin or mapharsen. One exception remains: if the central nervous system syphilis is advanced, the patient is blind, having marked optic atrophy, no further damage to the optic nerves can occur, and, if so desired, tryparsamide may be given if deemed absolutely necessary.

If the syphilitic patient on tryparsamide therapy complains of ocular symptoms the differentiation between a primary optic atrophy of luetic or of toxic tryparsamide origin becomes a most important consideration. The luetic optic nerve involvement shows the gradual contraction of the visual fields and loss of visual acuity with an occasional central scotoma present, while the tryparsamide involvement occurs after normal fields, fundi and vision were originally present, with symptoms sudden and during treatment, central vision remaining unaltered and the fields showing a characteristic constriction vertically with sparing of the temporal field and never showing a central scotoma.

The symptomatology is characteristic, for if after tryparsamide treatment is begun, the patient complains of dazzling heat waves before his eyes, light flashes, or spots and objectively the vertical type of concentric contractions are noted in the visual fields, the recommendation is immediate and permanent discontinuance of the tryparsamide.

From the ophthalmologist's point of view, the treatment of the resulting tryparsamide involvement of the optic nerve must be immediate to be of any avail. It has been our policy to recommend fever therapy, preferably a course of malaria, plus two or three years of further trivalent arsenical and bismuth therapy, or a course of penicillin. In many cases, innoculation with malaria immediately after noting the toxic drug reaction has definitely stopped the atrophic process at that point, or produced improvement, but unhappily, some cases have progressed to total optic atrophy even with the above regimen.

Massive vitamin therapy has been tried and deemed a failure by many investigators, as has been the subdural method of treatment. Moore and his co-workers at Johns Hopkins state that in at least 10 per cent of the cases treated by this last method, blindness was precipitated.

In the primary luetic optic atrophies, surgery has been attempted on the theory that the condition is due to an arachnoiditis of the chiasma and optic nerve. Vail and Hausman had some success along these lines, but Dandy, in three intracranial explorations, found no arachnoiditis present. Surgery, however, has proved of no avail in tryparsamide optic atrophy.

SUMMARY

Tryparsamide, a pentavalent arsenical, exhibits a toxic affinity for the optic nerve and its use in central nervous system syphilis should be concurrent with detailed ocular examination, specifically visual fields, central vision and fundi.

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In view of the objective symptoms of toxicity to the optic nerve, the patient undergoing treatment with this drug should be cautioned as to the symptomatology of toxicity.

At the first signs of drug toxicity, tryparsamide should be immediately and permanently discontinued and malaria therapy plus the other measures mentioned should be instituted.

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DETERMINATION OF SENILITY

No discussion on geriatrics would be complete if some consideration is not given as to what are the factors which determine senility. One of the first to be considered is that age is definitely not the sole criterion.

As much as Sir William Osler will be revered as a great man of medicine, few, if any, agree with what he said was his "fixed idea," that of "the uselessness of men above 60 years of age, and the incalculable benefit it would be in commercial, political and professional life if, as a matter of course, men stopped work at this age." The reading of all of the speech in which this famous statement was made leaves a clear-cut impression that Sir William made many statements to justify, to himself, as well as his colleagues and students, his retirement to lead the life of a gentleman in his native country.

There have been many who felt the same way before and since but it is clearly presumptuous and ridiculous to think everyone else who reaches the age of 60 should do likewise. Immediately the thought comes that many should quit at 30 or 40 while others should remain active as long as geriatric care can make it possible for them to contribute the results of their knowledge and experience to a world which has never been more confused since it began.—International Medical Digest.

OCULAR AFFECTIONS OF THE NEWBORN*

By FRANK D. COSTENBADER, M. D.,
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The ocular affections of the infant may encompass the gamut of general ocular affections excepting those incident to advancing age. For purposes of simplification, the scope of this paper will be limited to those conditions occurring during the first month of life, and even then many conditions will not be mentioned.

Under the general headings of trauma, infections, and unusual congenital conditions, several affections will be discussed. It is not always possible to classify a given condition properly. For example, ptosis may be due to improper development of a portion of the third nerve or nucleus, or to birth damage. Retrolental fibroplasia may be inflammatory or developmental. The same can be said for congenital lacrimal stenosis, and many other conditions. It can only be assumed that a certain modus operandi prevailed.

An effort is made to differentiate and discuss treatment of the common extra-ocular infections. Some comment will be made on the result of birth trauma, its possible effect on ocular function, and its influence on the infant as a whole. A few developmental anomalies whose significance should be recognized will be mentioned. And, finally, a small group of unusual and recently recognized ocular conditions will be discussed.

CONJUNCTIVAL INFLAMMATIONS

When the pediatrician, obstetrician or general practitioner is faced with an inflamed conjunctival sac in the newborn infant, differential diagnosis must be made, prognosis considered and treatment started. The conditions to be differentiated are gonorrheal ophthalmia, inclusion blennorrhea, "nonspecific" conjunctivitis, chemical conjunctivitis, and lacrimal stenosis.

Duke-Elder[1] points out that conjunctival infections take place more easily in the newborn because of the absence of tears (which have some antiseptic and bacteriostatic action), and the absence of lymphoid tissue. Another factor is the intimate contact with the birth canal of the mother during birth, and the hands of the nurse afterward. In discussing prophylaxis, Duke-Elder stresses (1) prenatal examination and treatment of the mother, (2) proper cleansing of the eyes and face, (3) instilling of 1 per cent silver nitrate

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solution in the conjunctival sacs, (4) exercise of care not to contaminate the eyes from the body after birth, and (5) the immediate investigation and treatment of any conjunctival discharge.

Thygeson[2] found that in 3,939 newborns of whom 261 were infected, the most frequent invaders of the conjunctival sac were the Staphylococcus aureus hemolyticus (51.7%), Bacillus coli, pneumococcus (13%), diphtheroids, catarrhalis, inclusion bodies (8.8%) and the gonococcus (0.38%) in that order of incidence. It should be pointed out that the frequency of gonorrheal conjunctivitis was reduced to one-tenth or less by Crede's prophylaxis, and even that has been further reduced by the discovery of the sulfonamides and penicillin. "Silver" prophylaxis does not prevent inclusion blennorrhea.

Gonorrheal conjunctivitis in the newborn is characterized by onset of intense redness and swelling of the lids, a beefy-red conjunctiva, and discharge *within 4 days after birth.* The discharge soon becomes purulent, greenish-white, and a pseudomembrane often is present. The gram-negative diplococcus is found on smear.

Inclusion blennorrhea shows a very similar clinical picture with most edema involving the lower lid, and the discharge yellow-white. The onset does not occur until *after the fifth day.* Conjunctival scrapings, stained with Giemsa stain, reveal intracellular inclusions (either a virus or the product of a virus) and often cervical scrapings from the mother reveal the same bodies. Allen[3] found 36 cases in 9,580 deliveries, while Thygeson[2] found 23 in 3,939 newborn.

Both gonorrheal conjunctivitis and inclusion blennorrhea respond well to penicillin and the sulfonamides. Sweet,[4] in treating 71 newborns with gonococcal conjunctivitis, used sulfanilamide, sulfapyridine, sulfathiazole, and sulfadiazine. He concluded that the three last mentioned were almost equally effective, though sulfathiazole and sulfadiazine were the drugs of choice. He preferred medication by mouth, but many have found local medication in the form of drops and ointment equally effective. Since the work of Sweet, penicillin has been found very effective in treating gonococcal infections and inclusion blennorrhea. The treatment of choice would be: (1) penicillin 10,000 units every 3 hours, intramuscularly, (2) sulfathiazole ointment, 5 per cent ophthalmic, in the conjunctival sac every hour, and (3) adequate protection of the uninfected eye by a cover glass.

The "nonspecific" infections of the newborn conjunctival sac (staphylococcic, colon, pneumococcic, etc.) in general show less acute signs, and respond well to the chemotherapeutic agents mentioned. Lemoine and Lemoine[5] report a case of mixed gonococcal and staphylococcal infection from the second day of life. The gonorrheal infection cleared on sulfathiazole 5 per cent ointment every half-hour but the staphylococcus persisted until treatment with penicillin was started two weeks later and then cure was effected within three days.

In days past, many conjunctival inflammations were blamed on silver nitrate which was too old or too strong. This is not often true. Most inflammations in which no organism could be isolated probably were cases of unrecognized inclusion blennorrhea. However, sensitivity to silver does occasionally occur. It is characterized by moderate swelling and seromucoid discharge, within twenty-four hours after birth. No organisms are found and symptoms subside spontaneously within two or three days.

Lacrimal stenosis rightly should not be included in this group of affections, since it is not principally an infection but a congenital anomaly. However, it does at times cause confusion in diagnosis. "Blocked tear duct" causes slight swelling and the onset of epiphora in 7 to 28 days, later followed by mucopurulent discharge. Antiseptics only clear up the overlying infection. Massage of the lacrimal sac three times a day, and later probing of the lacrimal canal if the blockage persists, are indicated.

When the newborn infant has epiphora, discharge, and swelling of the lids the following differential diagnosis should be made: gonorrheal conjunctivitis with acute swelling and persistent discharge within four days of birth shows gram-negative diplococci on smear. Inclusion blennorrhea shows the same picture at least five days after delivery and inclusion bodies from conjunctival scrapings. Nonspecific conjunctivitis with similar clinical manifestations at any time after birth, shows characteristic bacteria on smear and culture. Silver sensitivity begins at once, shows nothing on culture, and subsides spontaneously in two to three days. Lacrimal stenosis shows epiphora after a week, mild infection later, cleared up by massage or probing.

BIRTH TRAUMA

About ten years ago the author examined 200 newborn infants within 48 hours after birth. Evidence of external trauma were studied and found to be negligible. Many subconjunctival hemorrhages absorbed promptly without residua. Edema of the lids from forceps pressure persisted

two weeks in two cases. Twelve per cent of all births, with little regard for length or difficulty of delivery, parity or other factors, showed retinal hemorrhages. Only five cases of hemorrhage persisted after ten days and no apparent damage resulted from any.

However, the appearance of retinal hemorrhages raises two points of interest which yet have to be decided. Do persisting retinal hemorrhages involving the macula and leaving no evident fundoscopic damage, account for some cases of "congenital" amblyopia? Neither my cases nor others reported do more than suggest that possibility.

The other point of interest is that since the eye is a forward extension of the brain, it may be assumed that similar hemorrhages occur in and on the brain at birth. Since this may be true, one wonders whether some damage from absorbed intracranial hemorrhages may not account for delayed development, mild pareses, speech defects, reading difficulty, and a host of other things not ordinarily associated with gross defects of the central nervous system.

Contrary to the author's series of intra-ocular hemorrhages, McKeown[6] reports 498 newborns of whom 42 per cent showed retinal hemorrhages. From a careful analysis, he concluded that difficult labor so often found with primiparae, forceps delivery, and breech cases shows a high percentage of hemorrhages. Also, the posterior positions of the fetus cause a much higher percentage than the anterior ones. Thus, unusual, difficult, and prolonged labor causes intra-ocular (and probably intracranial) hemorrhage with the possibility of attendant ocular and nervous system damage.

Other ocular results of birth trauma have been reported by many. Lloyd[7] cites cases of rupture of Descemet's membrane from forceps injury, with subsequent high degrees of astigmatism and amblyopia. The author has seen one case from birth and others later in life, all with poor vision. Avulsion of the globe, ptosis, and paresis of the ocular muscles all have been reported, leading us to the obvious conclusion that obstetrical forceps should be used with considerable respect and conservatism.

Harley[8] reports a case of marked congenital proptosis of the globe, and when it subsided in thirty days without damage, assumed that orbital subperiosteal hemorrhage had been the cause.

UNUSUAL OCULAR AFFECTIONS

In recent years three groups of ocular conditions have aroused considerable interest. Insufficient time has elapsed for the final evaluation of any of them, but the interest now prevalent leads us to hope that causes and cures will be better known in the not too distant future.

A rare condition recently called to our attention is toxoplasmosis. This is a protozoan infection commonly found in rodents and birds but only recently found in man. According to Koch and his associates[9] toxoplasmic encephalomyelitis is transmitted from mother to fetus during pregnancy. It is characterized by (1) bilateral focal and multiple areas of chorioretinitis usually involving the macula, (2) intracerebral calcifications, (3) internal hydrocephalus, convulsions, and mental retardation, and (4) the presence of specific neutralizing antibodies. These antibodies are found also in the blood of the mothers. Koch and his fellow workers report six cases of infantile toxoplasmosis, some of which had active choroidal lesions, though most were inactive. All patients had poor vision.

I have seen two cases of proven toxoplasmic encephalomyelitis, and two presumptive cases. Very poor vision was present in four eyes (one for each patient), fair vision in three eyes, and good vision in only one eye. Central focal areas of choroiditis involved the macula in six eyes, and extramacular areas in the other two. One patient, when first seen at the age of four months, had floating masses, like absorbing vitreous hemorrhage, in the right eye (undoubtedly toxoplasmic choroiditis in a subsiding stage). All other cases were inactive when examined. Intracerebral calcifications were present in 3 cases, and mental retardation in all. Specific neutralizing antibodies were found in the blood of the two cases tested. I have recently operated upon one patient for marked esotropia with a satisfactory cosmetic result.

Toxoplasmosis as a cause of marked mental and visual disability in the infant and child needs further study. No specific treatment as yet has been found.

Recognition, and most of the study, of the second unusual condition was due to the interest and untiring efforts of Terry.[10,11] Retrolental fibroplasia (overgrowth of the primary vitreous?) has been noted in two forms. The full term infant at times will show a unilateral fibrous membrane behind the lens, apparent at birth or soon after. The more typical cases of retrolental fibroplasia are in definitely premature infants[10] and appear in both eyes from four to six months after birth. This condition typically shows microphthalmos, persistent hyaloid artery and tunica vasculosa lentis, fetal fibrillar type of vitreous, and a dense membrane often extending from the

ciliary body on all sides and covering the posterior surface of the lens. Frequently, the anterior chamber is extremely shallow and glaucoma occurs. X-ray therapy, iridectomy, excision of the membrane, or trap-door formation in the membrane have been attempted but all without success. Terry[11] offers premature loss of maternal materials, premature exposure to light, and hemorrhage and asphyxia as possible causes, but feels that precocious increase in blood pressure while the hyaloid artery is still patent may stimulate hypertrophy of vessels and increased fibrous tissue formation, and is a more probable cause.

I have seen four cases of retrolental fibroplasia. The condition was bilateral in two and unilateral in two, the membrane being complete in four of the six involved eyes and limited to the nasal retrolental region in the other two. Prematurity was a factor in only two cases. It is interesting that the two unilateral cases present different conditions of the other eyes. One had high congenital myopia with fair vision. The other had congenital retinal septa. The vision of seven of the eight eyes was limited to perception of light. An attempt to remove a piece of the retrolental membrane in one case was completely unsuccessful, phthisis bulbi eventually resulting.

In 1942, Gregg[12] and his associates reported an epidemic of German measles in Australia, possibly associated with the great movement of troops. It was noted that a typical syndrome consisting of (1) congenital cataract, (2) congenital heart deformity, (3) malnutrition, and (4) mental retardation, frequently was found in the offspring of mothers who had rubella during the first trimester of pregnancy. Gregg reported 78 cases of cataract, all but 16 bilateral, 44 or more having heart disease (patent ductus arteriosus, or foramen ovale), and all were physically and mentally retarded. Microphthalmos, sensitivity to atropine, and searching nystagmus were frequent findings. At operation, the cataracts were difficult to incise and slow to absorb. The chief point of interest was that all but 10 mothers had rubella during the first three months and usually during the first two months of pregnancy.

The National Health and Medical Research Council[13] also reported 61 infants whose mother had some illness during pregnancy, 49 having rubella, 9 morbilli, and 2 mumps. This group gave birth to babies, 36 of whom had congenital defects, 13 being congenital cataracts and 1 congenital glaucoma. The Council's conclusion was that rubella during the first 4 weeks of pregnancy causes congenital defects in 100 per cent of the offspring, while during the third four weeks only 50 per cent of the babies are defective.

Having had our attention called to this new association of prenatal conditions, numerous small similar series have been reported. Reese[14] reported 3 mothers having rubella during the first 4 weeks of pregnancy. All of the babies had some degree of microphthalmos, congenital nuclear cataract, shallow anterior chambers, and congenital cardiac lesions. Mydriatics had not been used because of fear of increased intra-ocular tension.

Perera[15] reported one case of dense central cataracts (which were slow to absorb on needling), patent ductus arteriosus, and malnutrition in the baby of a mother who had rubella during the second month of pregnancy. Guerry[16] reports two cases of congenital glaucoma, one of which was bilateral with nuclear cataracts, microphthalmos, increased intra-ocular tension, large esotropia, congenital heart disease, idiocy, and malnutrition. Lagrange type operations were done and the tension controlled. The other case was unilateral with enlarged cornea and globe and increased tension but no cataract. Both mothers had rubella during the first eight weeks of pregnancy. Goar and Potts[17] recently reported seven infants, 6 having bilateral, and one unilateral microphthalmos, nuclear cataracts, cardiac anomalies, mental and physical retardation, and roving nystagmus. Three mothers had rubella during the first month, two during the second, and one during the third month of pregnancy. One mother did not have rubella, but the baby had the typical syndrome. The authors advise through and through discission of the lenses, though only a portion of their cases have been operated upon as yet.

The author has seen eleven cases of rubella cataract, eight well enough to justify reporting. Through the courtesy of Dr. Elizabeth Chickering, pediatrician, the findings on an additional case are available. Of these nine reportable cases, seven had bilateral and two unilateral cataracts involving the embryonic nucleus with clear cortex. Of these only two had normal size pupils, the others being small and resistant to cycloplegic. Two were sensitive to atropine. All had some degree of microphthalmos and microcornea except the two relatively uninvolved eyes. Five of the nine had high degrees of esotropia, while the other four had a lesser degree.

Two findings not previously emphasized were present: prematurity and lacrimal stenosis. Five of the nine babies were from two to five months premature, while three were two to four weeks premature. Three cases had bilateral lacrimal stenosis and had to have probings before further surgery could be done.

Because of the small resistant pupils, some sensitivity to cycloplegics, and the fact that the lens neuclei are frequently tough and membraneous, surgery of rubella cataracts is difficult, absorption slow, and the end results not too good. Of my nine cases, two died before surgery. Twelve eyes were operated upon in seven patients (some requiring second needlings, linear extractions, or iridocapsulectomies) with poor result in four eyes, fair result in six eyes, and good result in two eyes. Two patients, because of poor general condition, were operated upon under local anesthesia. I am not convinced of the wisdom of this procedure for future cases.

The general condition of these patients is interesting. Two died within five months because of cardiac or other anomalies. The seven living are all tall, frail babies of the type that gains slowly and is never robust. Seven of the nine had cardiac lesions (patent ductus arteriosus or foramen ovale), and on two there was no report. Fortunately, the hearts of these survivors improved spontaneously. One patient was deaf, and one had a marked hypospadias. All but one case was somewhat retarded mentally.

Thus in nine cases of rubella cataract, typical lens changes, cardiac anomalies, and physical and mental retardation are present.

From this brief summary of some of the reported cases of rubella cataract, it is evident that a new congenital syndrome has been found. Though no satisfactory explanation for such profound results from such a relatively innocuous infection as German measles has been offered, it is increasingly evident that rubella and certain other "virus" infections occurring in the mother during the first three months of pregnancy are associated with certain findings in the infant. Cataracts (typically showing a complete opacity of the embryonic nucleus), microphthalmia, small resistant pupils, sensitivity to atropine, cardiac lesions (usually patent ductus arteriosus or patent foramen ovale), malnutrition, and mental retardation are common findings. Less frequent are other findings such as deafness, urologic lesions, and congenital glaucoma.

It is to be hoped that a sufficiently large survey soon will be conducted in order to establish what percentage of pregnant women having rubella (and other virus infections) give birth to deformed offspring. Until such a time, all talk of therapeutic abortion should be held in abeyance.

This random wandering in the field of ophthalmology concerning the newborn has several purposes. The obstetrician, pediatrician, ophthalmologist and general practitioner are urged to prevent, differentiate, and treat adequately, the external infections of the newborn. The birth trauma should stimulate (in those doing obstetrics) the desire to prevent both ocular and intracranial damage by less forceful and better controlled deliveries. The final group of rubella cataract, toxoplasmosis, and retrolental fibroplasia is offered as a challenge to all who deal with the newborn. All of the victims of these conditions have extremely poor vision, and the day of prevention or improved treatment is greatly to be desired.

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MODERN TREATMENT IN EPILEPSY

The modern treatment of epilepsy requires a comprehensive study of the individual patient and utilization of all the available methods of therapy. Seizures may be related to organic brain lesions, such as tumors, abscesses, degenerative processes, scar formation following injury, or disturbances of body mechanisms with pancreatic or parathyroid tumors. This group is termed symptomatic epilepsy.

The other great division of epilepsy is the idiopathic variety, which includes all patients with seizures who have no demonstrable lesion of the brain and in whom there is no known physiologic body disturbance. No age group is exempt from epilepsy, but generally idiopathic epilepsy appears before the age of 25, while symptomatic seizures due to tumors must be ruled out in all patients, especially those in whom attacks develop after this age.—Henry M. Suckle, M. D., in Wisconsin Med. J.

FOOD POISONING

Food poisoning may be defined as any illness that results from the ingestion of food. This includes a wide variety of different substances, such as poisonous plants, fungi, metals, organic and inorganic chemicals, and bacteria and their products which have become incorporated in the food. In addition it may be correct to include the individual idiosyncrasies of certain persons in their reaction to, for example, shell-fish or strawberries, the eating of which may be followed by an attack of urticaria.

There is a widespread tendency for the public to blame the quality of the food as being the cause of illness, instead of realizing that the food is in most cases contaminated by those who handle it and by flies and vermin that are allowed to gain access to it.

There is no question that the number of outbreaks appears to be increasing, but it is difficult to say how much this is due to an actual increase and how much to the greater interest taken in food at the present time and to the fact that food poisoning is now notifiable. Communal feeding cuts both ways; thus, if an outbreak occurs in a large canteen attention is drawn to the numbers affected, whereas if the same number fed at home it would be impossible to assess how many would have been affected by a gastroenteritis that passed off rapidly and was never reported.

The great majority of outbreaks are due to the enterotoxin produced by the Staphylococcus aureus (coagulase positive), which is ubiquitous and is introduced into the food by those who handle it. Contamination may come from the hands, which may be infected from any septic condition the subject has on his person, and also from the nose, especially if a catarrhal condition is present. In canteens and elsewhere much food is prepared the day before it is eaten and reheated the next day before the meal is served. During this time the enterotoxin is formed; it is not destroyed by heat except at a temperature above boiling point. The difficulty therefore of implicating the infected food when the staphylococci have been killed can be appreciated.

To diminish food poisoning it is essential to insist on a high standard of cleanliness, the minimum amount of handling of the food, and that all who handle food must scrub their hands with soap and hot water before starting work; if they must dry their hands they should do so on a clean towel. This measure is especially important after using the lavatory. It has been said that much illness has been caused by consuming some person's excreta—nasal, oral, or intestinal.—British Medical Journal.

THE MASTER WORD

Radio commentators tell us that the French work five hours a day, four days a week, and that the British do very little more. With production per hour no greater than it is, no nation can support itself by working only 20 hours per week. It just cannot be done. If it made these people any happier to rest after their strenuous war experiences, there might be some excuse for this program, but such is not the case.

In 1903, Osler, one of the great physicians of all time, spoke of work as the master word for medicine. Among its many attributes, he said that it was "True balm to hurt minds, in its presence the heart of the sorrowful is lightened and consoled." Western Europe needs a great political physician.—Virginia Medical Monthly.

TELEVISION IN THE OPERATING ROOM

The surgeons at Johns Hopkins apparently are convinced that the use of television is the best method to be employed in the clinical instruction of surgery to a group of more than three or four people. If this is true, operating rooms being constructed today without allowance for the use of television already are outmoded.

Not only is it difficult for more than two or three people to see the operative field in the average operating room, but it is a well established fact that the number of pathogenic organisms which may be cultured from an operating room is in direct proportion to the number of people in the room, in spite of caps, gowns and masks.

On February 27, 1947, television of surgical operations was used for the first time at the Johns Hopkins Hospital. Two television cameras were in constant use during the experiment. Five operations were recorded and so sharp were the images reproduced that when a dollar bill was placed on the operating table for the purpose of focusing the estimated distance of the operating field from the camera, the serial numbers on the bill could be read clearly on the projection screens. The pictures were registered in black and white since technicolor is still in its experimental stage in television.

Recently the American College of Surgeons at its regional meeting in New York City reproduced certain operative procedures to the group assembled in the Waldorf Astoria hotel.

Again medicine progresses by utilizing modern science.—Connecticut State Med. J.

MASS X-RAY IN TB FIGHT

The most important activity of the National Tuberculosis Association and related organizations is the nationwide search for cases among apparently healthy persons in the early, symptomless stage of the disease. X-ray examination of the entire adult population offers the only solution to the problem of the unknown case. Mass x-ray services are provided through the voluntary organizations, affiliated with the National Tuberculosis Association, in co-operation with health agencies. The ultimate goal of complete eradication of tuberculosis can be attained if all cases are discovered and if adequate treatment of all active cases is provided.—New England J. Med.

The President's Page

During the past year, Dr. Wade H. St. Clair has ably outlined state and federal problems as related to the medical and hospital profession. I am sure that the system he gave us has been unanimously accepted by our members, so for me to enter into a detailed discussion of a political or economic subject as it refers to us would be but repetition.

I do have on my mind a subject to present to the profession as a whole for study, thought and consideration. I refer to the changes that have been instituted at West Virginia University—the new nine-man board appointed for nine years. I am told that all political strings have been cut, and if this is true, then we have made a great step forward in our entire educational system in West Virginia. Congratulations are certainly in order to our lawmakers, for rarely does such constructive legislation on the educational level ever emerge from that body.

I think one has the right to conclude that this Board of Governors of West Virginia University will lay plans for an overall, long-range program to take care of all the departments at the University, and particularly the graduate schools. When we speak of graduate schools, we at once think of the medical profession and wonder what disposition will be made of the present medical school and whether or not any consideration will be given to our need for a dental school. In the past, appropriations for the most part have been limited to the absolute needs of the University and the different small subdivisions scattered throughout the state. We have in no sense had a Mecca of education in West Virginia. Personally, I am thoroughly interested in the whole program, and being a physician, I am particularly interested in the future of medicine.

We are aware of the fact that possibly if our minds could have been working in unison in the past a great deal could have been accomplished in our particular field. It is not my purpose here to make any specific recommendations. However, I ask you to familiarize yourselves with conditions as they are developed in the educational field, especially with reference to the medical profession.

There are but few of us who have not had some dealings with the University: we are either graduates, have attended school there, or have sent our children there for their education. But we have oftentimes felt a keen disappointment in the apparent inability of our public officials to provide an educational program which would include both medicine and dentistry. I have talked to a large number of outstanding physicians of the state, and find that they are of the same opinion—that if an overall, long-range medical and dental educational program can be developed, in years to come the people of our state will reap untold benefits therefrom.

In making these statements, I express appreciation to the members of our committee of the West Virginia State Medical Association who in the years that have passed have worked so diligently to make it possible for us to maintain the situation as it exists today. Medical men are looked upon as the leaders in their respective communities, and many of the suggestions and proposals that will come from the University Board will necessarily depend upon our actions, ideas and thoughts concerning a more advanced general educational system in West Virginia. I hope that we as medical men may be able to fall in line to the man for a broader sense of responsibility.

Thomas Bee

President.

West Virginia Medical Journal

Official Journal of

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J. ROSS HUNTER, M. D.

With the passing of J. Ross Hunter, the medical profession of West Virginia has lost a distinguished and an outstanding member. Not only was he a leader in his chosen specialty of surgery, but he was an ardent student of general medicine as well. His greatest contribution to West Virginia was undoubtedly his work in cancer. A pioneer in oncology, in season and out of season, he urged cancer control and cancer therapy upon both laity and profession for a third of a century. Moreover, he was a proponent of all phases of good citizenship. A hard worker, a real philosopher, a consistent churchman and a noble Christian gentleman has gone to his reward. Truly, West Virginia is poorer without him.

We deem it fitting to reproduce here the beautiful tribute to his memory from the pen of an editorial writer in the *Charleston Daily Mail*:

> "It is eustomary to remark of good men, when they are gone, that with them the mold was broken. The comment is especially appropriate to the obituary of Dr. J. Ross Hunter, whose death the other day found his countless friends and associates poorly prepared to accept their loss. For Dr. Hunter was a man whose worth is not summarized in the listing of his professional achievements, distinguished and valuable as they were. It must be found, rather, in his personal qualities.
>
> "His was a ranging mind, coupled with a boundless energy and a seemingly inexhaustible capacity for good works. Thus his friends knew him, not only as a surgeon and a field general in the fight against cancer, but also as a philosopher and scholar, an enlivening wit and an enlightening conversationalist. Perhaps the tribute he most deserves is that he loved life, found it worth living and, in return, gave generously and modestly of his own.
>
> "There are too few such men in an age which needs them most. It is this thought, added to a sense of personal sorrow, which lends an air of special sadness to Dr. Hunter's passing. At a moment of great need it is necessary to pause reflectively upon a grave loss."

TEACHING PUBLIC HEALTH

It is encouraging to note that so many cities in West Virginia which have been without the services of a health officer for so long a time have now succeeded in finding qualified personnel for these positions.

Communities are becoming more and more health conscious, and there is reason to believe that additional cities and counties in the state will at some time in the near future take the necessary steps to merge their health units under the provisions of the law enacted at the regular session of the legislature in 1947.

The teaching of public health at West Virginia University and Fairmont State Teachers College, mentioned in a news article in this issue of the Journal, will undoubtedly stimulate interest in public health work among the students at these two educational institutions. Trained personnel available at this time is far short of the state requirements.

HOSPITAL CONSTRUCTION

The fact that West Virginia has received and deposited a check for $1,555,350 for the first year's allotment for construction of hospitals and health centers under the Hill-Burton act should spur to greater efforts those communities which expect to provide matching funds.

Deadlines for the filing of applications have been set in order to make sure that communities in the various priority groups may have the opportunity to make their wants known in regular order before the end of the present fiscal year.

The present cost of construction will probably prove to be the greatest handicap to communities interested in providing needed hospital facilities. However, it is to be hoped that the entire allotment fixed for West Virginia for the present fiscal year will be spoken for by cities needing these facilities before the absolute deadline on July 1, 1948.

General News

TWO APPLICATIONS ALREADY FILED FOR HOSPITAL CONSTRUCTION FUNDS

Deadline dates for the filing of applications for any part of West Virginia's allocation of $1,555,350 for hospital and health center construction have been set by the state health department. This step was taken in view of the fact that allocation of the state's share of the fund appropriated under the provisions of the Hill-Burton hospital construction act must be used by June 30, 1949. Any unused balance as of that date will be refunded to the treasury and will not thereafter be available for hospital construction purposes in West Virginia.

Priority Groups

Under the plan adopted, applications from communities in priority group AA (Whitesville, Petersburg, Grantsville, Point Pleasant, Webster Springs, Winfield, Chester and Weirton) must be submitted to Dr. N. H. Dyer, State Health Commissioner, not later than March 1, 1948.

Communities in Group A (Kingwood, Sutton, Spencer, Charles Town, Ripley, Weston, Madison, and Hinton) must submit applications by April 1.

Group B communities (Logan, Mullens, Philippi, Martinsburg, Buckhannon, New Martinsville, Fairmont, Keyser, and Ronceverte) must forward applications on or before May 1.

The deadline for communities in group C (Richwood, Marlinton, Charleston, Welch, Parkersburg, Clarksburg, and Wheeling) is June 1.

Communities listed in group D (Huntington, Bluefield, Oak Hill, Morgantown, Beckley, Williamson, Elkins, and Grafton) will have until July 1, 1948, to file applications for funds.

It has been announced by Dr. Dyer that the deadline dates fixed do not affect the priority status of any of the hospital service areas, and that they apply only to the consideration of applications for participation in the federal funds made available for the current fiscal year. The disposition of subsequent annual grants is not affected in any way by the fixing of these dates.

Limit on Allocations

According to Dr. Dyer, a limit has been placed on the amount of money that may be allocated for any one project under the appropriation for any single year. No project may be awarded more than fifty per cent of the total funds available to the whole state for any one year. If an eligible project requires an amount in excess of fifty per cent of the state allocation for a single year, the amount by which it exceeds that percentage must be allocated from the grant for the following year.

The state plan for the construction of hospitals and health centers has been approved by the state advisory committee on hospital construction, the surgeon general of the USPHS, and the public health council.

Funds Now Available

The state has already received its first year's allocation of $1,555,350, which has been deposited with state funds pending the receipt of matching funds from interested communities. The state health department is now receiving applications from all non-profit organizations which desire to obtain assistance to the extent of one-third of building and equipment costs for new hospitals or additions to existing acceptable hospital buildings.

As of February 15, 1948, two applications for participation under the provisions of the act had been received by the state health department.

FEBRUARY MEETINGS IN CHICAGO

The third meeting of the National Conference on Rural Health will be held Friday and Saturday, February 6-7, at the Palmer House, in Chicago. The conference will be in charge of Dr. F. S. Crockett, chairman of the American Medical Association's Committee on Rural Medical Service. Dr. Edward L. Bortz, president of the AMA, and Joseph H. Ball, U. S. Senator from Minnesota, will be the guest speakers at the luncheon on Saturday.

The annual National Conference on Medical Service scheduled for Sunday, February 8, will feature discussions of important controversial problems affecting medical practice, hospitals and nursing. Dr. Creighton Barker of New Haven, Connecticut, is president of the conference, and Dr. E. F. Sladak, of Traverse City, Michigan, is the secretary.

The 44th annual conference on Medical Education and Licensure will be held February 9-10, immediately following the meetings of the National Conference on Medical Service.

RELEASED FROM MILITARY SERVICE

Lt. Walter R. Wilkinson, MC, of Huntington, who has been serving as a member of the surgical staff at Brooke General Hospital, San Antonio, Texas, has been released from military service. He is now in Washington, where he is taking a postgraduate course in chest surgery. He will return to Huntington the first of March, to accept a surgical residency at the C. & O. Hospital in that city.

Dr. Joel F. Carr, also of Huntington, was released from service in the Navy, December 19, 1947, and will engage in general practice in that city. He is associated with Dr. V. L. Chambers, and has offices at 1038 Sixth Avenue.

AUTO EMBLEMS

An additional supply of automobile emblems has been received at the headquarters offices of the West Virginia State Medical Association. There has been a slight increase in price, the emblems now retailing at $3.00. Emblems will be mailed postpaid upon request to any member of the State Medical Association. Address all inquiries to West Virginia State Medical Association, Box 1031, Charleston 24, West Va.

DR. RUSSELL B. BAILEY HONORED BY STATE AND NATIONAL CANCER GROUPS

Dr. Russell B. Bailey, of Wheeling, who was recently named chairman of the executive committee of the West Virginia Cancer Society, has been honored by two additional cancer groups.

Besides being appointed by Dr. Thomas Bess, president of the West Virginia State Medical Association, as chairman of that organization's cancer committee to succeed the late Dr. J. Ross Hunter, of Charleston, he has been named by the American Cancer Society as a member of its board of directors to fill Doctor Hunter's unexpired term.

Doctor Bailey has for several years been active in the work of cancer groups in West Virginia and other parts of the country. He has been a member of the board of directors and the executive committee of the West Virginia Cancer Society since its organization in 1946.

PHC AUTHORIZES INTERIM PRACTICE

Under a new regulation of the public health council a qualified applicant for licensure to practice medicine in West Virginia will hereafter be permitted to practice in a specified area during the interim between the filing of his application and the date of the next regular meeting of the public health council, at which time he will be required to appear for examination.

Graduates of unclassified foreign medical schools will be permitted to serve as interns or residents in private hospitals and state institutions provided their services are requested by the proper officials prior to employment, and provided further that they present their credentials to the public health council in regular session and receive permission so to serve. However, they will not be permitted to serve outside the hospitals or institutions.

This regulation does not in any way rescind a previous regulation of the council which bars graduates of Class B schools from practice in hospitals in this state after July 1, 1948.

LICENSE REVOKED

The license of Dr. Elmer Groves Kesler of Williamsburg, Greenbrier County, to practice medicine in West Virginia was revoked by the public health council at a meeting held in Charleston, January 12, on the grounds of "habitual use of narcotic drugs."

HEALTH OFFICERS CONFIRMED

At a meeting of the public health council, held in Charleston, January 12-14, appointments of the following full-time county health officers were approved: Dr. Milton Roemer, Monongalia County; Dr. Alford Glenn Evans, Marion County; and Dr. W. G. C. Hill, Marshall County.

Dr. O. C. Campbell was appointed part-time health officer for Lincoln County.

The following doctors were confirmed as part-time city health officers: S. G. Moore, Harpers Ferry; O. F. Mitchell, Franklin; J. W. Stokes, Hinton; B. L. Liggett, Mill Creek; and Richard C. Neale, Bluefield.

MIDWEST REGIONAL CONFERENCE

The annual meeting of the Midwest Regional Conference, sponsored by the A. M. A. Council on Medical Service, held at Cleveland, January 4, was attended by representatives from the five participating states, Illinois, Indiana, Kentucky, Michigan, Ohio and West Virginia. The executive secretaries of the state medical associations of these states served as a committee on arrangements.

Papers presented were unusually interesting, and the meeting closed with a roundtable discussion of the topics presented by the speakers.

Mrs. Dale Thomas of Charleston, and Mrs. Chester D. Ellifrits of Elkins, president and executive secretary, respectively, of the West Virginia Congress of Parents and Teachers, were in Cleveland at the time and attended the confernce at the invitation of officers and members of the Council on Medical Service.

ACP ASSOCIATE FELLOWSHIPS

The West Virginia State Medical Association has been informed that the following West Virginia doctors were elected to associate fellowships in the American College of Physicians during 1947:

Esta Ross Allen, Clarksburg; James John Del Vecchio, Wheeling; Ludwig Frank, Charleston; Don Virgil Hatton, Huntington; Charles Hall Hiles, Wheeling; Max Koenigsberg, Charleston; and Robert Moses Sonneborn, Wheeling.

WILL TEACH PUBLIC HEALTH

Two county health officers recently confirmed by the public health council will teach classes in public health at state schools in addition to performing their official duties.

Dr. Milton I. Roemer, who was recently connected with the USPHS, and who will become health officer for Monongalia County on February 1, will teach public health at West Virginia University. He is a graduate of New York University College of Medicine, and has a master's degree in public health.

Dr. Alford G. Evans, who assumes his new duties as health officer for Marion county on February 1, will teach public health at Fairmont State Teachers College. He is a graduate of the Yale University School of Medicine and also has a master's degree in public health. Besides being engaged recently in statistical work for the Maryland State Department of Health, he has served with the U. S. Public Health Service.

OPENINGS AT N. D. BAKER VA CENTER

The Newton D. Baker Veterans Administration Center at Martinsburg is urgently in need of personnel at the Veterans Administration hospital. Applications are being received for clinical psychologist, physical therapist, occupational therapist, librarian, biochemist, and medical technicians. Full information may be obtained by writing to E. W. Johnson, Personnel Officer, Newton D. Baker Veterans Administration Center, Martinsburg.

A. M. A. HOUSE OF DELEGATES IN INTERESTING MID-WINTER SESSION

The second annual interim session of the house of delegates of the American Medical Association, at Cleveland, January 5-6, followed by a two-day scientific program arranged primarily for the general practitioner, proved of value from both an administrative and scientific standpoint.

The house of delegates adopted a new procedure for future meetings which will mean the modern streamlining of the sessions of hits important body. The 165 delegates present considered and discussed hospital insurance practice, distribution of medical care, especially to those living in rural areas, and the problem of the supply of nurses, internes and residents.

The activities of the board of trustees in furthering the work of the World Medical Association, reported by Dr. Elmer Henderson, the chairman, were approved.

The house of delegates voted unanimously to increase the subscription price of the journal of the American Medical Association, including fellowship, from $8.00 to $12.00 per annum, effective immediately.

Dr. Arthur Sudan, of Kremmling, Colorado, was the first recipient of the A. M. A. award for distinguished service to a "family doctor." Dr Sudan gave up a university teaching position more than twenty years ago to practice medicine in the mountains of his state. He has just completed a term as president of the Colorado State Medical Association.

The scientific and technical exhibits were up to par and the large auditorium on the lake front provided an adequate and ideal setting for the exhibits.

Both delegates from West Virginia, Dr. Walter E. Vest, of Huntington, and Dr. Ivan Fawcett, of Wheeling, attended the sessions.

Dr. George P. Heffner of Charleston, presented a paper before the general session on January 8. His subject was, "Diet and Insulin During Diabetic Complications."

The following West Virginia doctors attended the general sessions:

James Arthur Ayers, Weston; James P. Baker, White Sulphur Springs; John J. Brandabur, Huntington; Isadore Buff, Charleston; H. M. Brown, Charleston; Ivan Fawcett, Wheeling; George P. Heffner, Charleston; Frank J. Holroyd, Princeton; Adolph G. Kammer, South Charleston; John H. Kilmer, Martinsburg;

John J. Lawless, Morgantown; Marshall A. Moore, Montgomery; Stanley S. Phillips, South Charleston; Fred Hichmond, Beckley; L. P. Stanley, Charleston; Paul E. Vaughan, Beckley; Walter E. Vest, Huntington; Halvard Wanger, Shepherdstown; and W. Merle Warman, Morgantown.

CHARLESTON SURGEONS CERTIFIED

Dr. John C. Condry and Dr. John E. Lutz, both of Charleston, have been certified as diplomates of the American Board of Surgery.

CERTIFIED BY AM. COLL. OF ALLERGY

Dr. Jack Basman, of Charleston, has been certified as an active Fellow of the American College of Allergy.

COURSE IN MEDICAL WRITING

Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, will give an instructional course in medical writing at the next annual meeting of the Mississippi Valley Medical Editors' Association, to be held at Springfield, Ill., September 29, 1948, during the annual meeting of the Mississippi Valley Medical Society. No registration fee will be charged to members of the Association.

The Medical Editors' Association is contemplating changes in both its constitution and name as it is felt that the name "Editors" is entirely too restrictive, and the name Medical "Writers" or "Authors" Association would be more appropriate.

Information concerning this non-profit organization, as well as details of the meeting in September, may be obtained from the secretary, Dr. Harold Swanberg, 209-224 W. C. U. Bldg., Quincy, Illinois.

ARC NATIONAL BLOOD PROGRAM

The new National Blood Program of the American Red Cross was launched on January 12 when the first Regional Blood Center was opened in Rochester, N. Y.

The Rochester center will be followed in quick succession by the establishment of blood centers in Wichita, Kans., Atlanta, Ga., Washington, D. C., Louisville, Ky., and Stockton, Calif. By the end of the year it is anticipated that 50 regional centers will be in operation.

The new blood program is designed to fill the urgent needs for whole blood now being faced by the medical profession. Out-dated or unused blood will be fractionated and these products will also be made available to physicians without cost when they have been produced in sufficient quantities and been clinically proven.

The new program is an outgrowth of the cooperative wartime program of the Red Cross, the National Research Council, and the armed forces. The project has been launched by Red Cross after consultation with leaders in the American Medical Association, the American Hospital Association, the U. S. Public Health Service, the Army, the Navy, and the Veterans Administration.

The entire cost of collecting, processing and distributing blood wil be borne by the Red Cross. Blood will be received from voluntary donors and will be given without cost to patients. The patient will have no charge beyond the normal fee of physicians and hospitals in connection with the administration of the blood.

The program is long range in its aspects and is estimated to require from there to five years before every community is reached. Plans call for the eventual establishment of approximately 140 metropolitan centers throughout the country, with 250 secondary centers in smaller communities and several hundred mobile units to serve rural and suburban areas.

Regional and secondary centers, as well as mobile units, will be staffed by highly trained professional personnel and will operate under the supervision of the Blood Program committees at the local level.

FIRST WOMAN PRESIDENT OF LOCAL SOCIETY

Dr. S. Elizabeth McFetridge, of Shepherdstown, has been elected president of the Eastern Panhandle Medical Society, the first woman ever to be named president of a component society of the West Virginia State Medical Association.

In addition to her specialty of anesthesiology, Doctor McFetridge is engaged in general practice. She was recently named chairman of the Association's committee on maternal welfare by Dr. Thomas Bess, the president.

GRASS ROOTS CONFERENCE

The second National Conference of County Medical Society Officers ("Grass Roots Conference") was held on the evening of January 6, at the Statler Hotel. The program was devoted entirely to problems affecting the general practitioner. The session ended late at night after the presentation of three interesting papers on subjects in which the general practitioner is particularly interested. Dr. Frank J. Holroyd, of Princeton, is serving as both state chairman and area chairman of the Conference.

HUNTER MEMORIAL LIBRARY

Plans have been approved for the establishment at the Herbert J. Thomas Memorial Hospital, in South Charleston, of the "Hunter Memorial Library," in memory of the late Dr. J. Ross Hunter, of Charleston, who was serving as president of the staff at the time of his death on December 31, 1947. Contributions for this purpose are now being accepted by Mr. T. W. Patterson, the hospital administrator.

The long-range plan will probably include a circulating library for patients, as well as the medical library proposed for the use of the staff.

NEW DIRECTOR OF CANCER CONTROL DIVISION

Dr. James Keith Pickens, of Charleston, has been named by Dr. N. H. Dyer, state health commissioner, as part-time director of the division of cancer control of the state health department to succeed Dr. Paul R. Gerhardt, who recently accepted appointment as director of the New York state division of cancer control, at Albany.

Doctor Pickens was formerly located at Layland and has just recently completed a postgraduate course in obstetrics and gynecology at the Margaret Hague Maternity Center in Jersey City, New Jersey. He is associated with Dr. A. P. Hudgins, of Charleston, in the practice of his specialty of obstetrics and gynecology.

INDICATIONS FOR PROTOLYSATE

Protolysate is a readily available hydrolyzed protein for the patient with impaired digestive functions. When absorption is decreased, as in diarrheal disease, or when enzymes are deficient, as in pancreatic insufficiency, Protolysate will aid in provision of sufficient protein nournishment to avert protein starvation. For literature and professional samples of Protolysate, write Mead Johnson & Co., Evansville 21, Indiana.

NATIONAL FOUNDATION FELLOWSHIPS

Fellowships leading to a Master's Degree in Public Health in the field of health education are again being offered to any qualified United States citizen between the ages of 22 and 40, according to a statement released by the United States Public Health Service, Federal Security Agency. Funds are available through a grant from the National Foundation for Infantile Paralysis.

Candidates must hold a Bachelor's degree from a recognized college or university at the time the application is filed, and must be able to meet the entrance requirements of the accredited school of public health of their choice. Proof of acceptance at such a school must be furnished before applications are submitted to the Fellowship Awards Committee for consideration. In addition to the Bachelor's degree, courses in the biological sciences, sociology and education are required. Training in public speaking, journalism, psychology and work in public health or a related field is considered desirable.

The fellowship consists of 8 or 9 months' academic work, which begins with the fall term in 1948, and three months of supervised field experience in community health education activities in a local health department. The academic training includes courses in public health administration, epidemiology, public health and school education, problems in health education, community organization, information techniques, and others.

Veterans are encouraged to apply, and will be paid the difference between their subsistence allowance under the G-I Bill of Rights and the monthly stipend of $100 for single veterans or $150 for married veterans. Employees of state or local health departments are not eligible, since federal grants-in-aid are provided through the states for such training.

Information and application blanks may be obtained by writing the National Foundation for Infantile Paralysis, 120 Broadway, New York 5, New York.

AMERICAN BOARD OF OPHTHALMOLOGY

The American Board of Ophthalmology has announced practical examinations for 1948 as follows: Baltimore, May 20-25; and Chicago, October 6-9. Written qualifying tests must be filed before July 1, 1948.

A Supplement of diplomates, January 1947-January, 1948, will be sent without charge to all purchasers of the Board's directory. The supplement is arranged alphabetically and geographically, but no biographical material is included.

Full information concerning examinations may be obtained from Dr. S. Judd Beach, Secretary, Cape Cottage, Maine.

STATE HEALTH CONFERENCE

The Annual State Health Conference, sponsored by the state health department, will be held at Huntington, May 27-28. In addition to one general session, section meetings will be arranged, and the annual banquet will be held at the Prichard Hotel on the evening of May 28.

Obituaries

CHARLES LESLEY BOYERS, M. D.

Dr. Charles Lesley Boyers, 70, of Parkersburg, died January 2, 1948, at his home in that city, following a long illness.

Doctor Boyers was born in Fairmont, and received his M. D. degree at Maryland Medical College, Baltimore, in 1900, being licensed to practice medicine in West Virginia that same year. He located at Hebron, in Preston county, and practiced at Adlai and Ellenboro before moving to Parkersburg in 1920, where he practiced until he retired in 1937 on account of ill health.

Doctor Boyers was an honorary lifetime member of the Academy of Medicine of Parkersburg, the West Virginia State Medical Association, and the American Medical Association.

He is survived by three sons, Dr. C. E. Boyers, of Memphis, Tennessee, Paul A. Boyers, of Charleston, and Charles Boyers, now a student at Harvard Medical School.

* * * *

WILBERT GEORGE DRINKWATER, M. D.

Dr. W. G. Drinkwater, 87, of Gormania, died December 20, 1947, at Uniontown, Pennsylvania. Death was due to diseases incident to advanced age.

Doctor Drinkwater was born in Terra, Ontario, Canada, April 29, 1860. After graduating from the Collegiate Institute at St. Thomas, he enrolled at the Eclectic Medical College in Cincinnati, and received his M. D. degree there in 1888. He was licensed in West Virginia in 1889 and practiced continuously in the vicinity of Gormania for fifty-eight years.

Dr. Drinkwater was one of the oldest members of the West Virginia State Medical Association. He had been a member since 1909, and at the time of his death held honorary life-time memberships in the Potomac Valley Medical Society, as well as the State Medical Association and the American Medical Association. He had also been elected to life-time membership in the Allegany County (Maryland) Medical Society.

At a meeting of the Potomac Valley Medical Society on October 12, 1947, Dr. Drinkwater and Dr. R. W. Love, of Moorefield, were honored by the society upon the completion of fifty years' practice, each being presented with a gold pen and pencil set. The presentation was made by Dr. Arthur Hawkins, of Cumberland, who served as toastmaster at the meeting.

Doctor Drinkwater is survived by two sisters, Mrs. W. J. Perkins, of Windsor, Canada, and Mrs. John Bate, of Victoria, Vancouver Island, British Columbia.

* * * *

JONES ROSS HUNTER, M. D.

Dr. Jones Ross Hunter, 66, of Charleston, died of coronary thrombosis at a hospital in that city December 31, 1947. He was stricken the day previously while attending a meeting of the staff of the Herbert J. Thomas Memorial Hospital in South Charleston, of which he was president.

Doctor Hunter was born at New Sterling, North Carolina, February 26, 1880. He received his M. D. degree at the Medical College of Virginia, in Richmond, in 1903, interned at St. Francis Hospital in Norfolk, and was licensed to practice in West Virginia in 1904. After taking postgraduate work at Good Samaritan Dispensary in New York City, Doctor Hunter practiced at Glen Ferris for a year, at Marting for two years, and for several years was associated with the Sheltering Arms Hospital at Hansford as chief of the surgical staff.

Doctor Hunter practiced his specialty of surgery in Charleston from 1921 until his death. He participated in all activities looking toward the control of cancer and for years had been head of the cancer committee of the West Virginia State Medical Association. He has worked diligently with the Woman's Field Army of the American Cancer Society and two years ago helped organize the West Virginia Cancer Society. He was a member of the board of directors and chairman of the executive committee of that organization.

Doctor Hunter was closely identified with the work of the division of cancer control of the state health department and helped to organize tumor clinics in various parts of the state. He was a pioneer in this work at Charleston hospitals. At the time of his death, he was a member of the board of directors of the American Cancer Society.

During World War I, Doctor Hunter was a Lieutenant Commander in the Naval medical reserve corps. He was a member of the Kanawha Medical Society, the West Virginia State Medical Association, the American Medical Association, and a Fellow of the American College of Surgeons. He is survived by his widow, Mrs. Bertha Hunter, and two sons, J. Ross Hunter, Jr., an attorney of Charleston, and Dr. William S. Hunter, of Boston, Massachusetts.

CHANGES IN BUREAU OF TB CONTROL

Dr. R. L. Smith, acting director of the bureau of tuberculosis control of the state department of health, will leave February 1 to continue his studies at the University of Michigan School of Public Health. He expects to complete work for his Master's degree in public health by the end of the next semester.

Doctor Smith assumed his duties in Charleston on March 11, 1945, succeeding Dr. J. T. Duncan, who resigned to accept the position of assistant superintendent at the Tulaire-King County Tuberculosis Sanatorium, in California.

Dr. Charles Wehr, of the USPHS, will succeed Doctor Smith as acting director, and he is expected to come to Charleston the first of February.

Dr. Stuart Lauder, assistant acting director of the bureau, has been granted an indefinite leave of absence on account of ill health.

81ST ANNUAL MEETING
WEST VIRGINIA STATE MEDICAL ASSOCIATION
HUNTINGTON
MAY 10-12, 1948

County Society News

BOONE COUNTY

At the regular monthly meeting of the Boone County Medical Society, held December 17, in Madison, Dr. O. D. Ballard, of Van, was elected president, and Dr. David H. Hill, of Madison, secretary.

DAVID H. HILL, M. D.,
Secretary.

* * * *

CENTRAL WEST VIRGINIA

At the last quarterly meeting of the Central West Virginia Medical Society, held at Buckhannon, Dr. N. H. Dyer, state health commissioner, presented a paper on "General Health Work of the State Department of Health." The speaker discussed in detail the work of the various divisions and bureaus of the department, and the address was followed by a general roundtable discussion by the members present.

The following legislative committee was appointed for 1948: Drs. R. M. Fisher, W. W. Huffman, James E. McClung, E. H. Hunter, and W. B. Forman.

Drs. R. M. Fisher, I. F. Hartman, W. E. Echols, and J. M. Cofer were appointed delegates to the annual meeting of the State Medical Association at Huntington in May, 1948. Drs. J. C. Huffman, W. W. Huffman, K. A. Dillinger, and Guy Stalnaker were elected alternates.

The March 1948 quarterly meeting of the society will be held in Braxton County.

J. M. COFER, M. D.,
Secretary.

* * * *

EASTERN PANHANDLE

Dr. S. Elizabeth McFetridge, of Shepherdstown, has been elected president of the Eastern Panhandle Medical Society. Other officers were elected as follows: First vice president, Dr. John H. Kilmer, Martinsburg; second vice president, Dr. Wm. P. Warden, Charles Town; secretary-treasurer, Dr. George O. Martin, Mar-

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tinsburg; and board of censors, Dr. M. H. Porterfield, Martinsburg.

G. O. MARTIN, M. D.,
Secretary.

* * * *

FORT HENRY ACADEMY OF MEDICINE

Dr. William S. Middleton, dean of the University of Wisconsin Medical School, was the guest speaker at the meeting of the Fort Henry Academy of Medicine, held December 23, at Wheeling. His subject was "Medical Management of Thyrotoxicosis."

Discussion of Doctor Middleton's interesting paper was led by Drs. W. M. Sheppe and J. W. Gilmore, and several members and visitors participated in the discussion.

D. E. GREENELTCH, M. D.,
Secretary.

* * * *

GREENBRIER VALLEY

At the regular monthly meeting of the Greenbrier Valley Medical Society, held December 17, the following officers were elected for the ensuing year :

President, Dr. H. B. Strader, White Sulphur Springs; vice president, Dr. P. E. Prillaman, Ronceverte; secretary-treasurer, Dr. R. F. Hawkins, Lewisburg; board of censors, Drs. A. D. Ferrell, C. W. Lemon, and D. G. Preston; delegate, Dr. A. G. Lanham; and alternates, Drs. P. E. Prillaman, and C. F. McClintic.

P. E. PRILLAMAN, M. D.,
Secretary.

* * * *

HANCOCK

At a meeting of the Hancock County Medical Society, held December 16, at the Williams Country Club, the following officers were elected for 1948:

President, Dr. Eugene McNinch, Weirton; vice president, Dr. George Rigas, Weirton; and secretary-treasurer, Dr. Leonard Yurko, Weirton.

J. M. BRAND, M. D.,
Secretary.

* * * *

LOGAN

The regular monthly meeting of the Logan County Medical Society was held December 10 at the Aracoma Hotel, in Logan. The following officers were elected for 1948: President, Dr. E. H. Starcher, Logan; vice president, Dr. I. M. Kruger, Logan; secretary-treasurer, Dr. W. E. Brewer, Logan; delegates, Drs. A. M. French and W. E. Brewer; and board of censors, Drs. E. H. Starcher, A. M. French, and W. S. Rowan.

Dr. George N. Watson, of Logan, was elected a member of the society.

I. M. KRUGER, M. D.,
Secretary.

* * * *

MERCER

Dr. Daniel Hale, of Princeton, was elected president of the Mercer County Medical Society at the annual banquet meeting held December 18, at the West Virginian Hotel, in Bluefield.

Other officers were elected as follows: Vice president, Dr. Upshur Higginbotham, Bluefield; secretary, Dr. Frank Holroyd, Princeton; treasurer, Dr. R. C. Fugate, Bluefield: delegate, Dr. E. L. Gage, Bluefield; alternate, Dr. L. J. Pace, Princeton; and board of censors, Dr. J. I. Markell, Bluefield.

Dr. Harry G. Steele, of Bluefield, was elected dean of the society, and at the same time was named to honorary lifetime membership.

The by-laws were amended to provide that the time and place of future meetings of the society be fixed by the officers.

A committee composed of Drs. H. G. Steele, P. R. Fox, and Charles St. Clair was named to prepare resolutions concerning the late Dr. D. B. Lepper.

* * * *

Dr. Edward Palmer, of Roanoke, Virginia, was the guest speaker at the regular monthly meeting of the Mercer County Medical Society held January 15 at the Pinnacle Restaurant in Bluefield. His subject was "The Generality of Psychiatry." His paper was discussed by Dr. E. L. Gage.

At the business meeting held following the scientific program, resolutions of respect to the late Dr. D. B. Lepper were unanimously adopted.

The essay contest of the American Association of Physicians and Surgeons on the subject of "Resolved That the American Way of Practice is the Best Way in the World," was discussed by Dr. C. J. Reynolds, and Dr. E. L. Gage led a discussion on the various bills that have been introduced in Congress.

FRANK J. HOLROYD, M. D.,
Secretary.

* * * *

POTOMAC VALLEY

Dr. C. W. Stewart, clinical pathologist at the Baltimore City Hospital in Baltimore, presented a paper on "The Rh Factor and Its Clinical Application" before the Potomac Valley Medical Society at the regular meeting held January 14 at the Old Homestead Hotel in Burlington. The new president, Dr. R. W. Love, of Moorefield, presided at the meeting.

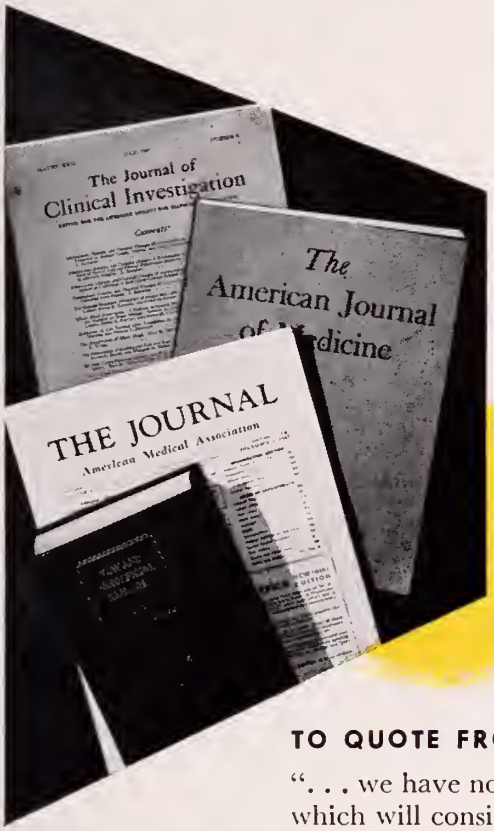
M. H. MAXWELL, M. D.,
Secretary.

* * * *

RALEIGH COUNTY

Dr. T. W. Murrell, professor emeritus of dermatology and syphilology at the Medical College of Virginia, Richmond, was the guest speaker at the regular monthly meeting of the Raleigh County Medical Society, held December 18, at the Black Knight Country Club, Beckley.

His subject was, "Had O. Henry Been a Doctor," and he entertained with medical reminiscenses extending



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1. *Combined Staff Clinics of the College of Physicians and Surgeons, Columbia University: Am. J. Med. 1:675 (Dec.) 1946.*
2. *Comroe, B. I.: J.A.M.A. 128:848 (July 21) 1945.*
3. *Council of Pharmacy and Chemistry: New and Nonofficial Remedies, 1947, Philadelphia, J. B. Lippincott Company, 1947, p. 477.*
4. *Freyberg, R. H.; Block, W. D., and Levy, S.: J. Clin. Investigation 20:401 (July) 1941.*

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

over a period of almost a half-century of medical practice.

Members of the Woman's Auxiliary were guests of the society at the meeting.

The following officers were elected for 1948: President, Dr. B. K. Peter, Beckley; first vice president, Dr. H. A. Shaffer, Beckley; second vice president, Dr. E. B. Wray, Stotesbury; secretary-treasurer, Dr. Fred Richmond, Beckley; board of censors, Drs. M. M. Ralsten, R. P. Daniel, and C. A. Smith; delegate, Dr. D. D. Daniel; and alternates, Drs. Paul E. Vaughan and T. U. Vermillion.

* * * *

Dr. Thomas Bess, president of the West Virginia State Medical Association, was the guest speaker at the regular monthly meeting of the Raleigh County Medical Society, held January 15, in Beckley.

Doctor Bess discussed what he felt should be one of the main objectives of the State Medical Association, i. e., a long-range plan so far as West Virginia University and future medical education in the state are concerned. The speaker also discussed the need for the establishment of a course of instruction sponsored by the American Medical Association, for officers of state medical associations, so there could be some common objective, rather than a different objective for each state association.

At a business meeting preceding the scientific program, Dr. Sam I. Sato, of Slab Fork, was elected to membership in the society.

W. FRED RICHMOND, M. D.,

Secretary.

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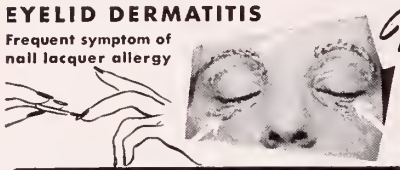

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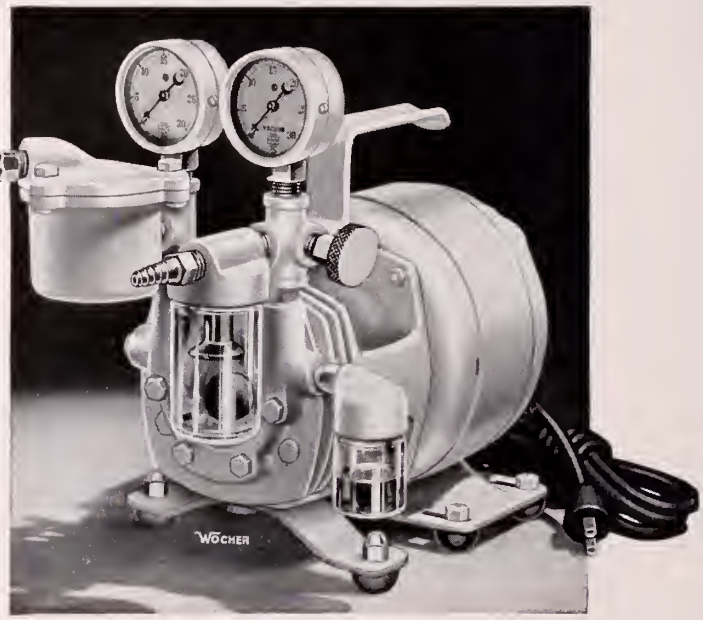

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Woman's Auxiliary

CABELL

The Rev. Edward M. Blum, Rector of St. Peter's Protestant Episcopal Church, was the guest speaker at the regular monthly luncheon meeting of the Woman's Auxiliary to the Cabell County Medical Society, held January 13, in the Crystal Room of the Frederick Hotel, Huntington.

Hostesses were Mesdames M. W. McGehee, C. A. Hoffman, Carl Kappes, L. C. Richmond, Edward Reaser, W. D. Bourn, and Stanley Weinstein.

Plans of the committee on projects and exhibits for a Valentine party for the children in St. Mary's Hospital and the Orthopedic Hospital were discussed by Mrs. Frank Barker. The party is scheduled for Valentine Day.

MRS. GATES J. WAYBURN,
Editorial Chairman.

* * * *

HARRISON

Mr. Charles Lawson, of Clarksburg, executive secretary of the community chest, was the guest speaker at the monthly dinner meeting of the Woman's Auxiliary to the Harrison County Medical Society, held January 8, at the Waldo Hotel, in Clarksburg. The social and character building agencies which comprise the chest were discussed by the speaker, who explained the various functions of the organization in the community.

MRS. J. T. GOCKE,
Secretary.

* * * *

PARKERSBURG

The annual Christmas luncheon meeting of the Woman's Auxiliary to the Academy of Medicine of Parkersburg, was held December 16, in the Blennerhassett room at the Chancellor Hotel, with Mrs. A. M. Jones and Mrs. R. H. Boice serving as hostesses.

Dr. James L. Wade and Dr. Robert S. Widemeyer were guests at the luncheon. "Bureaucratic Medicine" was discussed most interestingly by the speakers.

Mrs. Charles Goodhand, the president, presided at the meeting, which was attended by twenty-nine members.

* * * *

Dr. Dean F. Smiley, of the A. M. A. Bureau of Health Education, was the guest speaker at the regular monthly luncheon meeting of the Women's Auxiliary to the Academy of Medicine of Parkersburg, held January 13, at the Chancellor Hotel in Parkersburg. His subject was "Putting the Facts of Preventive Medicine to Work."

The speaker said that under an ideal health program all expectant mothers would be under a doctor's supervision, and all births would take place in hospitals. He advocated a monthly check-up of all children, immunization, and trained personnel to examine school children for defects. He also advocated

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MEDICINE—Intensive Course, Two Weeks, Starting April 26.
Personal Course in Gastroscopy, Two Weeks, Starting March 29, April 19.
Electrocardiography & Heart Disease, Four Weeks, Starting February 16, May 3.
CYSTOSCOPY—Ten Day Course Starting March 1, March 15, March 29.
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Dr. Smiley stressed the importance of an annual examination by adults. Its value in prolonging life can not be estimated, but statistics show that only about seven per cent of the population have such examination.

"Health education," he said, "should stress knowledge of preventive medicine, public health services in rural schools, a more comprehensive hospital building program, and volunteer planning for medical and hospital care."

Admitting that there has not been the progress in health education that is desired, the speaker said that there is now undoubtedly increasing interest in developing health education in secondary schools.

The tables in the City room at the Chancellor were decorated with jonquils and greenery for the occasion. Mrs. M. A. Gilmore and Mrs. R. D. Lattimer were the hostesses, and the program was arranged by Mrs. Harold W. Ulch.

Mrs. S. W. Goff, chairman of the program committee, presided at the luncheon which was attended by sixty members and guests.

MRS. ATHEY R. LUTZ,
Corresponding Secretary.

PG COURSE IN ELECTROCARDIOGRAPHY

A five-day intensive postgraduate course in electrocardiography has been announced by Emory University Faculty for May 17-21, 1948.

Emphasis will be placed on the clinical interpretation of the electrocardiogram in the light of modern excitation theories and the newer techniques in electrocardiography. The uses and interpretation of multiple chest leads, unipolar leads, the ventricular gradient and variation in normal patterns wil be stressed.

In addition to the Emory University Faculty, Dr. George Burch, of Tulane University, and Captain Ashton N. Graybiel, MC, USN, will participate in the program as guest speakers. The registration fee is $40.00, and applications should be mailed to the Director, Postgraduate Education, Emory University School of Medicine, 36 Butler Street, S. E., Atlanta 3, Georgia.

BOOKS

The general practitioner who has a good mind and a sound background can gain additional knowledge and wisdom by regularly spending a little of his spare time with books. Even the march of science cannot leave him far behind if he faithfully pursues his intellectual obligation. This term is used advisedly. No physician has a right to deal in human lives without keeping up with his trade. He must know the market and figure his margins in order to escape utter ruin.

The physician who follows his profession without books is bound to become as blank as Rip Van Winkle. When it is too late to pull himself out of Sleepy Hollow he will awaken with a sad realization of his unpaid debt to humanity. Hopelessly, he will accept his intellectual rags and stand ashamed in the presence of those who daily commune with the masters. With palid acquiescence he will acknowledge the attainments and skills of those who read.—J. Okla. St. Med. Assn.

Book Reviews

HANDBOOK OF FRACTURES—By Duncan Eve, Jr., M. D. F.A.C.S., Nashville, Tenn. The C. V. Mosby Co., St. Louis, Missouri. Price $5.00.

This small handbook on fractures is very concise and practical. It was written by a man who has apparently treated many hundreds of all types of fractures.

The discussion of various methods of treatment is short and to the point and little space is wasted comparing the value of different methods of treatment.

There are several methods of treatment given which are at variance with those commonly used. On page 67, the author describes the Jones position in treating fractures of the humerus in children. In this method the forearm is acutely flexed on the arm. This frequently produces marked swelling and has been the cause of many cases of Volkmann's ischemic contracture. It is much safer to flex the forearm to 90 degrees only, at the elbow, and immobilize it with a posterior plaster splint.

On page 92, there is shown an illustration of an incision through which the head of the radius may be removed. This is right over the head of the bone, but it is easy to cut the posterior interosseus branch of the radial nerve through this incision, thereby producing wrist drop. It is safer to make the incision along the proximal end of the ulna and dissect up to the radial head, thus avoiding the nerve.

In discussing the treatment of compression fractures of the spine, the author states that the cast should come down to the pubic symphysis in front, as this is one of the strategic pressure points. Yet, on page 144, the illustration shows the cast to end several inches short of the pubic symphysis.

On page 163, in discussing treatment of fractures of the neck of the femur by means of extra articular mechanical fixation, the author states that bony union occurs in approximately 85 per cent of the cases. In Smith-Peterson's original series of 24 cases, published in 1930, the percentage given was 75, and as more statistics have been collected the percentage of unions has steadily fallen.

The author is to be commended for several ingenious methods which he introduced. His instrument, illustrated on page 244, for assisting in the reduction of metatarsal fractures seems especially good.

All in all, this book should prove very valuable to medical students and young doctors just starting to practice.—H. A. Swart, M. D.

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SEXUAL BEHAVIOR IN THE HUMAN MALE—By Alfred C. Kinsey, Professor of Zoology, Indiana University, Wardell B. Pomeroy, Research associate, Indiana University, and Clyde E. Martin, Research Associate, Indiana University. Pp. 804 Philadelphia and London: W. B. Saunders Co. 1948. Price $6.50.

The authors of this book have interviewed over 12,000 persons for the purpose of collecting material for a study of sexual behavior and the problems associated with sex. This book is based on the detailed histories of the 6,200 males so far interviewed. (It is planned to continue the work until 100,000 cases have been studied.) These are broken down into 163 groups according to age, age at adolescence, race, marital status, occupation, occupation of parents, rural-urban, and religion (group and whether devout or otherwise).

The personal interview was used in collecting the material because it is, as the authors show, the most reliable method of getting all or nearly all of the desired items in an individual's history. Questionnaires fail in this respect, because interviewers with proper rapport elicit much information which social taboos prevent the subject from putting down himself. One has only to read the chapter entitled "Interviewing" to realize that the authors know their business.

The book is not primarily concerned with generalizations for the population as a whole, but with understanding the behavior of each of the various segments. "Total sexual outlet" is broken down into various categories, and one of the most important findings is that the frequencies with which the various outlets are used depends to a large extent on the social level to which the individual belongs. For instance, premarital intercourse is much more common among those males who do not go beyond grade school, while masturbation is the rule among single males at college. In general, there is a wide range of activity between various individuals, both as to frequency and outlets chosen; this is reflected in the extreme differences of opinion held by various people about the handling of sex problems.

Frequencies for the homosexual outlet and for intercourse with animals are much higher than previously published material would lead one to expect, and there is reason to believe that the actual rates may be higher than found here, due to reluctance to admit socially taboo behavior. In passing, it might be well to note that the incidence of animal intercourse among those who have the opportunity (rural background) is about seventeen percent. In any other field, a variation found in seventeen percent of a population would be considered a normal variant.

Among other findings of interest are the fact that the younger generation is no worse (if that is the proper word) than the older, and that several decades of drives against prostitution have succeeded in reducing the frequency of intercourse with prostitutes by a third to a half, with a concomitant rise in extramarital intercourse with non-professionals, and no change in the total outlet.

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This book is bound to arouse controversy, since the facts presented differ markedly from almost universally held beliefs, and the conclusions to be drawn from these facts run into some of our most violent prejudices. But it will be a very useful book to the practicing physician, enlarging the scope of his understanding of his patients and fellow human beings. Many a disturbed individual can be shown that the behavior about which he is worried is little different from that of others in the group to which he belongs. And, furthermore, the book represents a definite increase in our knowledge of our fellow human beings, and such is bound to result, in the long run, in improved understanding.—David W. Northup, Ph. D., Assoc. Prof. of Physiology, West Virginia University School of Medicine.

WANTED—Tuberculosis Clinician. Must be eligible for West Virginia license. Salary range, $420.00 to $500.00 monthly, plus travel.—West Virginia State Dept. of Health, Charleston, W. Va.

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AMERICAN HEART ASSOCIATION, INC.,
1790 Broadway,
New York 19, N. Y.

January 15, 1948.

Mr. Charles Lively, Secretary
West Virginia State Medical Association
Box 1031
Charleston 24, West Virginia

Dear Mr. Lively:

National Heart Week in 1948 has been designated as the week of February 8-14, inclusive. The American Heart Association and its local affiliates are planning for this period an intensive program of public education and, for the first time, will make a direct appeal to the public for funds to finance our program, including research.

We have obtained the full support of Doctor Thomas Parran, Surgeon General of the United States Public Health Service, as well as assurance of active cooperation from industrial, pharmaceutical, insurance and business groups and from national service organizations such as the American Legion, Rotary, Kiwanis, Lions, and Junior Chamber of Commerce.

There is obviously no need to inform members of State Medical Societies of the public health aspects of the problems of diseases of the heart and circulation. We realize, however, that our campaign cannot be successful without the active endorsement and assistance of the Medical Societies. We are, therefore soliciting your invaluable help.

We have written to the Governor of your state, requesting him to issue a proclamation of National Heart Week concurrent with a proclamation to be issued by President Truman. We have also written to the State Health Officer advising him of our approach to the Governor and suggesting that their endorsement take the form of a special health education program during National Heart Week to inform the public of the facts about heart disease and of the neecssity for community programs to attack this problem.

We are enclosing copies of material explaining the program and activities of the American Heart Association. It would be most helpful if the Medical Society would add your endorsement to that of the Governor and State Health Officer in whatever manner you feel would be most appropriate and effective.

Sincerely yours,

CHARLES A. R. CONNOR, M. D.,
Medical Director.

CARC:mfw
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To conquer fatigue, play music. So say 51 members of the Doctors' Orchestral Society of New York who take time off once a week from their busy professional lives to "relax" by rehearsing for their winter season symphony concert.—R. N.

CANCER CONTROL

Doctors see some cases of cancer that are curable and others that are not. Most if not all cases were curable at the onset, that is, before direct, regional or remote extension had nullified the possibility of eradication by available methods.

Some deeply seated cancerous lesions such as the pancreas, adrenal, and some non-obstructive lesions of the stomach and colon, give so few early symptoms that it is rare for the physician to have the opportunity of attempting early diagnosis, and even if he does, early diagnosis is at times extremely difficult. This is also sometimes true of advanced deep seated malignancy as is amply demonstrated when autopsy on a patient dying after weeks of intensive study reveals a previously undetected cancerous lesion. If we are not already humble, such experience should serve to make us so; but by no means does it justify a defeatist attitude. Striving to surmount difficulty is the doctor's opportunity and obligation, resulting in medical progress. Many deep seated cancers are successfully diagnosed and treated.

On the other hand, many malignant lesions are easily detectable and with little effort. Yet too often patients in this group apply for treatment after the disease is far advanced. There seems to be two groups of factors accounting for delay in cancer therapy. One, those attributable to the patient; two, those attributable to the doctor.

Fear, negligence, and ignorance are probably the most frequent deterrents on the patient's part. The financial factor is important. It is well to remember that the more advanced the lesion, the greater the loss of time and financial outlay involved in combating the disease.

Unquestionable progress in avoiding delay of cancer treatment by patients is being accomplished by the program of the American Cancer Society. This program is designed to offer the patient hope instead of fear, education to combat ignorance and superstition, and a warning against negligence. In addition, it is part of the program to encourage communities to raise funds to provide hospitalization and treatment of needy cancer patients. The program should have the full cooperation of the medical profession.—A. Street, M. D., in The Mississippi Doctor.

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TOLERANCE IN TREATMENT

There are certain physicians who, after finding no physical cause for the patient's complaint, feel a definite sense of frustration which may be expressed in the statement, "You have no physical disease and I cannot help you—you just think you are sick." After such remarks some physicians lose all interest in the patient and often hope he will not return.

Another physician, in attempting to follow some physical treatment method for the emotionally distressed patient, may say, "Your blood pressure and heart action are not exactly normal and we must start treatment." Both decisions are probably in error—the first because it shows lack of tolerance, interest and understanding, and the second because of his symptoms. This conclusion will thus tend to foster invalidism.

The best stimulus to good patient-physician relationship is an attitude of wholehearted, sincere interest on the part of the physician, along with a willingness to listen carefully at least once to the patient's entire story of his complaint problem. The alert physician will learn much of the personality of the patient from the method of recital itself as well as from the content material. With the development of individual techniques of interviewing, the physician will find himself elated with his successes and stimulated to further study. A broader personal tolerance will be gained and this will stand him in good stead when psychotherapy begins to be utilized in the treatment situation.—Addison M. Duval, M. D., in Virginia Medical Monthly.

FUTURE OF PSYCHIATRY

Medicine, as do other professions, tends to travel in waves, each rising school of thought or theory holding sway for a shorter or longer period depending upon its fundamental soundness and usefulness, then falling away to be lost, or remaining as a part of the body of knowledge which constitutes either the science or practice of medicine.

Since the turn of the century and with the introduction of precision instruments and scientific methology into medical practice, the fundamental relation of the doctor and patient tended to be lost or forgotten.

The doctor by virtue of his training came to look at his patient as a mass of pieces and parts, some of which had become fouled, and which required fixing if the symptoms were to be done away with. The patient thus came to be regarded as a "rheumatic heart" or an "acute appendix" but the fact that the patient was also a person, with the feelings of a person, often was overlooked. Here and there various doctors intuitively discovered and used this old truth, but only two groups really practiced it throughout these past 50 years. One group was that of the general physicians whose daily contact with the patient and his family produced real regard of the patient as a person. The other group was that of the psychiatrists, who possessed few other therapeutic tools beyond that of the doctor-patient relationship with its intricate workings.—Donald W. Hastings, M. D., in The Journal-Lancet.

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GERIATRICS AND/OR GEROTOLOGY

The prolongation of human life has been of interest from the beginning of time and it has reached a stage of effectiveness so that many articles are appearing in which the question is being raised as to what should be done for and with the increasing number of patriarchs and matriarchs.

Never before has there been so many old people, and as a recent editorial in a popular magazine comments "never before did so few old people live with their families." "We are no longer a patriarchal or even a rural people" it continues. So "the rocking chairs on the farmhouse porch, where grandpa could drowse" away his few last years and in which grandma could knit sporadically are rapidly vanishing. Yet many of them are still alive and must be cared for because it is estimated that of 10,000,000 aged Americans, less than a million fall into the class of those pictured in the insurance advertisements as basking in the sunshine on a southern beach or on the deck of a steamer cruising in tropical waters. Instead about 4,000,000, merely exist on some form of small handout. Others must be cared for otherwise.

This increase in life expectancy has been entirely due to the steady progress which has been made in the art and science of medicine in general and in preventive medicine in particular. The statistics are familiar and have been cited frequently in the recent writing. We have from time to time used them. They may be appreciated by recalling that a baby born in 1789 (the earliest reliable compilation) could look forward to only 34 years of life in contrast to the latest evidence that life expentancy is a small fraction less than 64 years at present. If the rate increase which has prevailed during the past decade continues, many believe the increase will be from 5 to 10 years more in the next 25 years.

The consensus among statisticians and naturally among pediatricians is that this steady increase in human life is due almost entirely to the prevention of mortality and diseases in early life. Yet when Abraham Jacobi, the Nestor of American Pediatrics, began his first systematic course in pediatrics in 1860 very little interest was shown by the medical profession. Eventually it was widely accepted as a specialty and the results which have been attained in the first half of the present century have fully justified the vision of Jacobi.—International Medical Digest.

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MEDICINE STILL AN ART

In the beginning, medicine was entirely an art, and remained so for thousands of years. There was but little science of any kind in the world, but gradually men began to organize their knowledge, and do experiments. Old text-books were entitled "The Art and Science" of this or that subject, art usually coming first. The addition of accessory instruments, like the microscope, hastened progress. John Hunter, his physician, Jenner, and a host of others like Pasteur, Lister and Koch became pioneers in placing medicine on a scientific basis, although art still played an important role in caring for the sick. Today, with increased knowledge of physiology, pathology and bacteriology, and the rise of specialism, medicine tends to become more a science, and less an art.

To obtain the best results with patients however, physicians and surgeons cannot afford to overlook the human side of their profession. While the human body is compared with a complicated piece of machinery, and the comparison is logical to a certain extent, the body possesses qualities which cannot be imitated by man in any machine. There are intellect, emotions, habits, inheritance and environment to be reckoned with. It comes natural with some physicians to know how to handle such things; others learn the hard way, or never at all.

Often judgment and diplomacy of a superlative degree are required to cope successfully with the peculiarities and idiosyncrasies of the patient, although the scientific aspects of the case have been analyzed and interpreted perfectly.—Frank K. Boland, M. D., in J. Med. Assn. Georgia.

TRAINING OF PATHOLOGISTS

The pathologist should be a medical consultant holding the same relation to medicine as the judge does to the legal profession. To fill this position properly his training should be threefold. First, he should be thoroughly grounded in the application of the experimental method to medicine; second, he should know how to do an autopsy and how best to show the clinician the lesson it teaches both in regard to diagnosis and treatment; third, he should be well versed both in the interpretation and the technics of all the laboratory aids to diagnosis and treatment of disease.

The above type of training can best be given in a university department of pathology. While it is not essential that the department of pathology have under its own jurisdiction bacteriology, hematology, surgical pathology, and so on, it is essential that a training program for medical graduates be instituted that will turn out proper pathologists. These pathologists should be at home in the autopsy room, the experimental laboratory, the routine laboratories, and the clinic.—Douglas H. Sprunt, M. D., in Southern Medical Journal.

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THE DIAGNOSIS AND TREATMENT OF ECTOPIC PREGNANCY*

By H. HUDNALL WARE, JR., M. D.
Richmond, Virginia

Ectopic gestation is not a common complication of pregnancy, but it is a frequent cause of maternal deaths. In Richmond, Virginia, during the ten years prior to 1940, every eleventh puerperal death was due to an ectopic gestation, and since 1940 this complication has caused every seventeenth puerperal death.

Williams and Corbet in 1944 reported that every twelfth maternal death in Chicago and every sixteenth such death in New York was due to an ectopic pregnancy. This would indicate that we need to recognize earlier this dangerous complication of pregnancy and improve our treatment if we are to prevent many of these unnecessary deaths.

An ectopic pregnancy is one in which a fertilized ovum has become embedded outside of the uterine cavity. This definition includes tubal pregnancy, even in the interstitial portion of the fallopian tube, and pregnancy in the broad ligament and peritoneal cavity.

The history of the recognition of ectopic gestation and the development of its modern treatment is interesting and impresses one with the recent advances in diagnosis and treatment of this frequently fatal accident. Schuman in his monograph says extra-uterine pregnancy was apparently unknown to the ancients. The same author says, "The first recorded case is that of Albucasis, an Arabian physician living in Spain and flourishing about the middle of the eleventh century."

Scheffey reports "In 1851 Charles D. Meigs, professor of midwifery and diseases of women and children in Jefferson Medical College, described with punctilious accuracy a series of cases of ruptured ectopic pregnancy, the symptoms, signs and gross pathology of which might have been written for a textbook of today."

A review of the charts of any series of patients with ectopic pregnancy reveals the difficulty one encounters in making an accurate diagnosis in many of these cases. It proves also that early diagnosis and operation for this accident of pregnancy reduce the mortality resulting from it.

We have reviewed all of the proven cases of ectopic pregnancy of less than twenty-eight weeks' duration admitted to the Medical College of Virginia Hospitals during the past seventeen years, a total of 296 consecutive cases. We have reported in earlier papers a statistical study of these cases through 1944. The management of ectopic pregnancy has been improved in recent years. The establishment of a blood bank in the Medical College Hospitals has made it easy to give transfusions of whole blood with a minimum of delay in emergency cases. The interns and residents diagnose ectopic pregnancy earlier and more frequently than they did a few years ago. These and other factors have enabled us to reduce our mortality rate in patients with this complication.

In this paper we will review 146 consecutive cases with proven ectopic pregnancies admitted to the Medical College Hospitals since January 1, 1940, a period of seven years. It is gratifying to note that the gross mortality rate in this group of cases is only one-seventh of the rate for pa-

*Presented before the Cabell County Medical Society, at Huntington, West Virginia, March 13, 1947.

tients with the same complication during the ten years prior to 1940. A review of the charts of all of these patients and personal observations on many of them have focused our attention on several points which we think are helpful in the diagnosis and treatment of early ectopic pregnancy.

Etiology.—We cannot agree with the statement that salpingitis is the most common cause of tubal pregnancy. Evidence of pelvic inflammatory disease was found in less than one-half of our cases. Developmental anomalies are responsible for many cases, and endocrine dysfunction is probably responsible for most of them. Interference with the passage of the ovum from the fimbriated end of the tube to the uterine cavity may result from obstruction of the tubal lumen either from within or from without, anomalies of the tubal lumen and accessory tubes, decidual reaction in the tube, and growth of a fertilized ovum to such an extent that it cannot enter the tube.

Peritubal adhesions may cause strictures or kinking of the tubes. Tumors in the uterine wall and neighboring organs, ovarian cysts, and sometimes certain types of uterine suspension may result in strictures or kinks of the fallopian tubes.

Frequency.—Titus says that ectopic gestation occurs once in every 300 pregnancies. Stander reports an incidence of one in 403 pregnancies in the Woman's Clinic of the New York Hospital. Marchetti, in a more recent paper from the same clinic, reports an incidence of one ectopic gestation in every 293 pregnancies. Scheffey reports an incidence of ectopic pregnancy of 1.3 per cent in 5,579 consecutive gynecologic patients at Jefferson Hospital. In the Medical College of Virginia Hospitals ectopic pregnancy occurred once in every 70 obstetric admissions.

Schuman says that 70 per cent of his cases of ectopic pregnancy occurred in patients between the ages of twenty and thirty-three, inclusive Eighty-four per cent of our cases occurred in patients between the ages of 20 and 35. The youngest patient was 16 years of age and the oldest was 42. This corresponds with the ages during which most women become pregnant.

Forty per cent of our patients were nonresidents of Richmond and many were referred from a distance of fifty to one hundred miles. This corresponds with the total per cent of referred cases on the service.

DIAGNOSIS

Ectopic pregnancy should be suspected in any woman within the child-bearing age who has abdominal pain, particularly if it is located in the pelvis and is unilateral in type. The diagnosis of ectopic gestation is more probable if the patient has a history of amenorrhea, or irregular slight vaginal spotting, or bleeding, and pelvic pain. The presence of a unilateral, exquisitely tender, boggy mass in the pelvis increases the probability of this accident.

If one suspects ectopic pregnancy, a few pertinent questions usually give valuable information. It is suggested that the examiner try to obtain the exact dates of the last three menses and the duration of each. This questioning often reveals that the most recent vaginal bleeding did not occur at the expected date and that it was probably less in amount than the flow during a normal menstrual period. Frequently, the patient complains of excessive pelvic pain or severe dysmenorrhea. Unruptured early ectopic pregnancy rarely is diagnosed because the patient seldom consults a physician until a leak or partial rupture of the pregnancy sac has occurred and she has experienced some pelvic pain.

The patient with an acute rupture of an ectopic pregnancy usually presents the typical textbook picture with a history of acute, sharp, or aching pelvic pain, a feeling of faintness or actual syncope accompanied by an increase in pulse rate, a drop in blood pressure, and rapid decrease in red blood cells and hemoglobin. Immediate operation is indicated.

Only one case in four in our series had the above-mentioned signs and symptoms. Stated conversely, 75 to 80 per cent of patients with ectopic pregnancies do not give a history or have the signs and symptoms usually described in textbooks as typical of ectopic gestation. Over one-third of the patients we have seen were admitted to the hospital with a history of pelvic pain for several days or weeks, and a tender pelvic mass. The diagnosis in these patients is difficult to make because pelvic tumor, ovarian cyst, infected abortion, and pelvic inflammatory disease must be ruled out.

The importance of a careful, accurate history in all patients is well recognized. When ectopic pregnancy is suspected, an accurate history is often all that one needs in order to make a correct diagnosis.

Menstrual history.—One-half of our patients had not missed any menstrual periods, one-fourth had missed only one menstrual period and only 18 per cent of the patients had missed two or more menses. Frequently, the patient who states she has not missed a period has had a little vaginal bleeding but not the usual amount of menstrual flow.

Vaginal bleeding.—Seventy-eight per cent of the patients had slight vaginal bleeding which was recorded as follows: continuous slight bleeding, 9 per cent; spotting or intermittent slight bleeding, 69 per cent. The absence of profuse bleeding and clots was significant and we think this is particularly important when pelvic inflammatory disease or incomplete abortion must be ruled out. We have seen only one patient with an ectopic pregnancy pass large blood clots and this patient had uterine fibroids also.

Pain is the most common and consistent symptom associated with ectopic pregnancy. It occurred in all of our patients and in the order of frequency it was recorded as follows: cramplike pelvic pain, 58 per cent; sharp, lacinating pain, without fainting, 35 per cent; sharp, pelvic pain, with fainting, 25 per cent. A few patients complained of both cramplike pain and sharp pain, and 10 per cent had some shoulder pain in addition to the pelvic pain. This accounts for the failure of the figures to add up to 100 per cent.

Pelvic pain of a dull, aching type was three times as frequent in patients with a pelvic mass as it was in the patients with acute rupture. Fainting, associated with sharp, lacinating, or cutting pelvic pain was ten times more frequent in patients with acute rupture of the tube than it was in those with a pelvic mass.

Most patients with ectopic pregnancy complain of cramplike pelvic or lower abdominal pain on the affected side early in pregnancy. This pain is said to be due to uterine contractions and tubal distention. Pain may be caused by early hemorrhage into the tube wall before there is a leakage of blood into the peritoneal cavity.

Blood Examination.—The white cell count was below 10,000 in one-half of our patients, and below 15,000 in 70 per cent of our total cases. It was above 20,000 in only 9 per cent of the patients. The white cell count increases immediately after rupture of an ectopic pregnancy and usually drops to normal within twenty-four hours unless there is recurrence of the internal hemorrhage. In pelvic inflammatory disease the white cell count is usually higher and it remains elevated much longer.

The red cell count is low most frequently in the acutely ruptured cases. It increases more rapidly than the hemoglobin when hemorrhage stops, and the ruptured ectopic pregnancy becomes walled off. On admission to the hospital, 49 per cent of our patients had a red cell count below 3,000,000. The hemoglobin was below 50 per cent on admission in one-fifth of the cases. A rapid decrease in hemoglobin is frequently more significant than the initial reading.

Temperature.—A subnormal temperature is frequently found in an acutely ruptured ectopic pregnancy. In 3 out of 4 patients in our series the temperature of the patient on admission was below 100 F. In 96 per cent of all the patients it was below 101 F., and in no case was it above 103 F. Thus it appears that ruptured ectopic pregnancy, even with hematocele, usually causes a very slight elevation of temperature. This characteristic subnormal or slightly elevated temperature associated with ruptured ectopic pregnancy has been valuable in differentiating suspected pelvic inflammatory disease and septic abortions.

Pulse.—The pulse rate is characteristically rapid when ectopic pregnancy is ruptured. It was below 80 per minute in less than 3 per cent of our cases and it was between 80 and 110 per minute in three-fourths of the patients. It was above 120 per minute in 25 per cent of the patients in this series of cases.

Blood Pressure.—Twenty per cent of the patients were in shock when admitted to the hospital. But only 36 per cent of the total series had a systolic pressure below 100 millimeters of mercury on admission to the hospital.

Methods of Examination.—Bimanual pelvic examination was resorted to in 90 per cent of our cases. If ectopic pregnancy is suspected, both internal and external examination should be done carefully and with extreme gentleness. Manipulation of the cervix causes pelvic pain in most cases if the pregnancy sac is leaking or has ruptured. The importance of limiting bimanual examinations and observing extreme gentleness in doing any internal examination must be emphasized. Shock following a pelvic examination on a patient with ectopic pregnancy is not unusual in large hospitals.

We do not believe in posterior colpotomy or puncture of the cul de sac with an aspirating needle for the purpose of diagnosing ruptured ectopic pregnancy. In the presence of an organized clot no blood will escape through the needle. This procedure increases the chances of infection and its dangers were emphasized by Schuman in 1921.

The diagnosis of ectopic pregnancy was made prior to operation in 90 per cent of our cases. We are unable to state accurately the percentage of patients operated upon for ectopic pregnancy who did not have this condition. We think 10 per cent of the cases diagnosed as ectopic pregnancy were found to have other conditions at the time of operation. Pelvic inflammatory disease of

long standing was the condition most difficult to differentiate.

Seven per cent of the patients had been operated on previously for ectopic pregnancy in the opposite tube.

TREATMENT

Ectopic gestation should be treated surgically as rapidly as possible after the diagnosis is made. We agree with Titus who says, "Expectant treatment for an ectopic pregnancy at any stage and in any location is highly hazardous, as the sac may rupture without a moment's warning, and the patient die from the ensuing hemorrhage." Operation should be limited to removal of the ectopic pregnancy and control of the hemorrhage. Fifty per cent of the patients in this series were operated upon within twelve hours after admission to the hospital, many within the first hour after admission. All patients who have lost much blood should be given continuous oxygen before, during and after operation.

In most cases any form of stimulation or intravenous injection to raise blood pressure before operation is dangerous because it may raise the patient's blood pressure and cause further internal hemorrhage. If glucose or normal saline solution is used intravenously and the patient continues to hemorrhage, more blood cells will be lost and the patient's blood may be so diluted as to prevent proper oxygen supply to the vital centers. We usually start a transfusion just as the patient is ready for operation and by the time any appreciable amount of blood or other fluid has been given the internal bleeding has been controlled or stopped. The volume of blood a patient needs corresponds with the amount she has lost. This can be accurately estimated by measuring the clots and liquid blood removed from the peritoneal cavity.

Ether anesthesia with a high concentration of oxygen has given good results even in our worst cases. Usually the patient's blood pressure begins to rise and the pulse volume improves immediately after the bleeding vessels have been clamped or ligated.

There were 2 deaths in this series of 146 cases, an uncorrected mortality rate of 1.36 per cent.

SUMMARY AND CONCLUSIONS

We have reported on a series of 146 consecutive cases of early ectopic pregnancy admitted to the Medical College of Virginia Hospitals since January 1, 1940.

There were 2 deaths in this series of cases, a mortality rate of 1.36 per cent. At autopsy the cause of one death was found to be central necrosis of the liver and peritonitis. The patient in the second case was apparently doing very well and died suddenly three hours after operation. This was probably an embolic death, but autopsy was not permitted.

Low abdominal or pelvic pain is the most frequent and persistent symptom of ectopic pregnancy.

Abnormal vaginal bleeding, usually scant, occurred in 75 per cent of the cases.

Amenorrhea was noted in only one-half the number of patients in our series.

A unilateral tender, boggy, pelvic mass was diagnosed in 51 per cent of our cases.

Subnormal or slightly elevated temperature associated with a rapid pulse and low hemoglobin and red cell count is very suggestive of ruptured ectopic gestation.

Early operation reduces the mortality rate.

Transfusions with whole blood to replace the blood lost save lives and hasten recovery.

Continuous oxygen for patients bordering on shock and in shock has been beneficial in our cases.

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CEREBRAL PALSY CLINIC

By MARGUERITE E. MacGREGOR*
Wheeling, W. Va.

October of 1947 marked the first anniversary of the founding of an organization in Wheeling, West Virginia, dedicated exclusively to the task of helping victims of cerebral palsy to help themselves. The idea originated with members of the Wheeling-Ohio County Junior Red Cross and was developed by them as a post-war civic project. The financial needs were met by their own efforts: dances, ball games, magazine subscriptions, etc., with no outside help. The youngsters had to be pretty resourceful because, aside from the salary for a good occupational therapist, they had to provide physical therapy treatments and equipment.

The Ohio Valley General Hospital provided quarters in which to operate, and the board of education furnished the tables and chairs. A victrola was donated, and with this meager equipment the little clinic operated once a month under the direction of Miss Virginia Perry, of Pittsburgh. They were particularly fortunate in being able to draw on her services.

Miss Perry has been especially trained in cerebral palsy techniques under Dr. Earl R. Carlson, recognized as a world authority on the subject. She is employed by the board of education in Pittsburgh to supervise all work connected with cerebral palsy victims in the Pittsburgh schools. She holds a special orthopedic teaching certificate from the University of Pittsburgh and is a member of the National Society of Special Educations, as well as a director of the Allegheny Society for Crippled Children.

With several physicians to advise and guide its policies the clinic started off with ten children. They were brought to the Ohio Valley General Hospital twice a week for relaxing physical therapy treatments, and once a month met with Miss Perry for individual training and advice. Children were brought to and from the hospital by the Red Cross Motor Corps.

Toward Spring, Junior Red Cross was joined by the Wheeling Society for Crippled Children, Inc., which assumed half the responsibility for management and half of the expense of the project. The clinic was visited by national representatives of both the Society for Crippled Children and the American Red Cross, and approved by them.

Miss Florence Mendelsohn, physical therapy consultant for the National Society for Crippled Children and Adults, came for a consultation and to offer assistance from the national group. As a result of this consultation, plans for a much amplified program for the next year were developed. Under the new arrangement the Wheeling Society for Crippled Children, Inc., undertook to pay the expenses incident to bringing in a physical therapist especially trained for this type of work, as well as all expenses for equipment, both for regular use in the clinic and for individual use in the homes, when recommended by the orthopedic specialists. They also provided a trained speech therapist.

The Junior Red Cross provided two rooms at the headquarters of the Wheeling-Ohio County Chapter, and supplied the necessary secretarial aid and transportation through the Red Cross Motor Corps. Relieved of the expenses for physical therapy, they were able to bring Miss Perry to Wheeling twice a month instead of once and to invite twenty children instead of ten to participate in the program.

The new physical therapist, Miss Jacqueline Fike, is employed by the Allegheny County Society for Crippled Children. Her record includes a B. S. degree from the University of Pittsburgh and special training in physical therapy in the D. T. Watson School, affiliated with the University of Pittsburgh School of medicine. She is certified by the National Registry of Physical Therapists. Her experience has been in the Bedford School, Watson Home for Crippled Children, and special service in the 1946 polio epidemic in Pierre, South Dakota, where she was sent by the National Foundation for Infantile Paralysis.

Miss Margaret Kohr, the speech therapist, holds a Master's degree in her work from the University of Michigan and at present is handling the speech defect work in the Wheeling public schools.

The two pleasantly decorated rooms at the Red Cross headquarters have been equipped by the Society for Crippled Children with built-in parallel walking bars and specially designed sets of steps arranged on one side to correspond to an ordinary stairway in a home, and on the other to simulate in measurement steps of a public conveyance. There are also standing tables designed to accustom a child to standing on his feet for periods of time while playing with toys, a special chair with head and body braces, skis and low chairs with wide supporting arms. Some of this equipment is being made in the manual arts department of the Wheeling schools. Form

*Ed: The author, who was active in the organization of this clinic, is identified with both the sponsors, The Junior Red Cross and the Wheeling Society for Crippled Children. She was asked to make this report of the Ohio County unit because of the growing civic interest in the problem of cerebral palsy.

games for use of the occupational therapist are also made. Other groups make scrap books for use in speech training. Every school child in Ohio County is a member of the Junior Red Cross and has a chance to participate in some way in this program.

No child is admitted to the clinic without being referred by his physician. All work is under the direction of orthopedic surgeons. Each doctor referring a case is asked to fill out a questionnaire outlining the abnormal orthopedic findings and suggesting the type of physical therapy indicated. An effort is made to screen all cases carefully in order to eliminate uneducable children, since it is recognized that, in spite of the best efforts, a certain number of these cases cannot be helped on account of the extent of the cerebral damage. After a child is admitted, the referring doctor is requested to visit the clinic from time to time to observe his patient's progress, to supervise the work, and to determine the need for surgery or braces.

Each biweekly meeting begins at nine o'clock and is continued all day with an hour or so reserved at the end for consultation with prospective patients. Present at each session of the clinic is a member of the Junior Red Cross committee, acting as hostess, with two junior members to assist her and a representative of the Crippled Children's Society. Each child is taken first to the physical therapist, who, under the doctor's advice goes about the retraining of the little patient's muscles by application of passive, active assisted, or active motion, relaxation, massage and other treatments. The purpose is to assist the child to get better control in the movements of arms and legs, gain better balance and form concepts of walking.

The child is then taken over by the occupational therapist, who introduces skills for the patient to use. Form games, weaving looms, and other devices intended to develop strength and accuracy in the use of arms and hands are employed. All efforts are directed at encouraging coordination of the muscles. In an effort to make the child self-reliant and independent, special emphasis is placed upon the activities fundamental to daily living, such as eating, dressing, and taking care of personal needs.

To the speech therapist falls the duty of correcting bad speech habits and, indeed, teaching some children to talk from the very beginning. Each patient requires different treatment, as for instance retraining the different muscles of tongue, throat, or others necessary to speech. All work is done before a mirror so as to permit the child to have a visual demonstration of the required movements and at the same time observe his own success in imitating them.

The most important advantage of this clinic is that all instruction is given to the parents as well as the child. After the correction is explained certain exercises for home use are mapped out. In two weeks a check is made on the child's progress and necessary changes made.

The work of our clinic as outlined above is planned solely as an aid to the medical profession. The physical and occupational therapy treatment is designed to augment, not replace medical and surgical care. This is the tedious work for which no busy doctor has time. To the best of our knowledge, there is no similar training center in this state, nor are there specially trained physical therapists available at present to carry on such a program.

There is no misunderstanding about the element of time in these cases. Many of them, doubtless, would improve gradually by themselves. Many others would remain in wheelchairs for a lifetime but for the encouragement and help in training dormant muscles. Nobody discounts the psychological effect of companionship with other children similarly afflicted, which removes inhibitions and frees the child from the sense of being at a disadvantage. Add to these imponderable factors scientific and constructive muscular training, and the results can be very rewarding.

To be wholly effective the work should be carried on day by day and should have a greatly amplified staff. However, with its small corps and its modest facilities, this group has had the deep satisfaction of watching the sometimes remarkable improvement of its patients and feels warranted in going ahead enthusiastically. To have helped even one child to achieve a means of oral communication, to have taught him to stand or to walk, or in any other way to have improved his position in society amply justifies the work that has been done by the boys and girls of the Junior Red Cross and the financial support that has been given by the Society for Crippled Children. Among the many groups of unfortunates there is no one to whose members rehabilitation, even in a small degree, may mean so much as to the victims of cerebral palsy.

A "bone bank" has been set up at the Geisinger Memorial Hospital in Pennsylvania. Surplus bone for chip grafts can be kept indefinitely at a temperature of 10 degrees F., says Dr. Leonard Bush, thus eliminating one stage of a grafting operation.—R. N.

FRACTURE OF THE GREATER MULTANGULAR BONE

(Report of Two Cases)

By RANDOLPH L. ANDERSON, M. D.,
Charleston, West Virginia, and
THEODORE KATZ, M. D., Linden, New Jersey

The eight carpal bones of the wrist are arranged in two rows: a proximal and a distal. Those of the proximal row, named from the radial side, are the navicular or scaphoid, the lunate or semilunar, the triangular or cuneiform, and the pisiform. Those of the distal row, named in the same order, are the trapezium or greater multangular, the trapezoid or lesser multangular, the capitate or os magnum, and the hamate or unciform. This paper deals with the trapezium or greater multangular bone which articulates with the lesser multangular bone, the navicular bone, and with the first and second metacarpal bones.

It is well known that isolated fractures of the carpal bones of the wrist, with the exception of the navicular bone, are relatively rare. It is thought that discussion of the fracture of the greater multangular bone, or trapezium, and a report of two cases, might be of interest.

Jaeger reviewed the literature on this subject in 1931 and at that time found only nine verified cases of isolated fracture of the greater multangular bone and only twenty-two cases of fracture of the greater multangular altogether, that is, fracture of the greater multangular combined with other carpal lesions.

Greene and Miller found twenty cases of fracture of the greater multangular bone reported in the literature and gave an excellent review of the subjct. Drobny reported two cases of isolated fracture of the greater multangular bone in 1933. Oden reported two cases in 1934 and Moriconi reported one case in 1936. Stack found seven other cases between 1932 and 1936 and Petridis and du Bourguet also reported isolated cases of fracture of the greater multangular bone.

Blumer found one isolated fracture of the greater multangular bone in seventy-nine carpal fractures. Thirteen cases were found in combination with other fractures.

Greene and Miller state, "in order to produce such a fracture the thumb must be abducted and its metacarpal bone rigidly fixed." In other words, indirect trauma was, in their opinion, the common type of injury causing such a fracture, and they think that it usually occurs as a result of a fall on the hand. However, Bendell thinks that this fracture usually occurs by direct violence. Of course, it may also occur as the result of a gunshot wound. C. C. Anderson believes that it may occur as a result of hyperextension of the thumb during which the greater multangular bone, or trapezium, is brought in such violent contact with the scaphoid, that a fracture occurs.

SYMPTOMS

The symptoms of this injury are swelling and pain on the radial side of the wrist at the base of the thumb. The pain is pronounced with motion of the thumb. Mandl reports a case in which pressure on the anatomical snuff box caused pain when the extensors and abductors of the thumb were stretched.

X-rays confirm the diagnosis and may show a spicule broken off of the greater multangular bone, or perhaps a transverse fracture near the middle of the bone, or, in some instances, a comminuted type of fracture. Of course, following a gunshot wound the fracture is usually comminuted.

Greene and Miller recommend treatment by immobilization of the thumb and wrist with the thumb placed in slight abduction at an angle of 45 degrees to the carpal bone for a period of eight weeks.

The prognosis ordinarily is good, with little disturbance of function except for possible limitation of apposition of the thumb.

CASE REPORTS

CASE 1.—H. S., white, male, age 45, was brought to the outpatient department of the McMillan Hospital, May 10, 1943, following an injury to his right hand. He stated that a board from a saw struck his hand a few minutes previously.

There was a deep laceration of the palm extending from a point midway between the index finger and the thumb, and running in the direction of the ulnar side of the wrist, almost to the pisiform bone. No tendons had been lacerated. X-ray examination showed a compression type of fracture of the greater multangular bone. The fracture was comminuted.

The patient was taken to the operating room by one of us, (T. K.), where the soft tissues were cleansed and sutured under local anesthesia, and the hand immobilized on a splint. Fifteen hundred units of tetanus antitoxin were given.

Two days later moderate edema of the hand was noted. However, there was no sign of infection and the wound appeared clean. The sutures were removed May 15th, the hand was dressed, and the splint reapplied.

The patient was seen again May 21st and May 28th. There was still some swelling of the hand,

but there was no evidence of infection. On the latter visit, which was three weeks after the accident, the splint was removed. There was some stiffness of the metacarpo-phalangeal joint of the right thumb for which hot soaks were advised. By June 4th the swelling had subsided somewhat, active and passive motions were begun, massage was begun, and the warm soaks were to be continued. This treatment was carried out through July 21st, on which date the patient returned, complaining of pain in the metacarpal region of the thumb, and stiffness and slight swelling in the thenar region and adjacent palm. There was very little active motion in the carpo-metacarpal joint. There was some tenderness and stiflness of the metacarpo-phalangeal joint.

Another x-ray examination was made July 21st, almost ten weeks after the injury, which showed the previously described fracture of the greater multangular bone, with impaction of some of the fragments, wide separation of others, and no evidence of callus. The senior author, R. L. A., was consulted and the patient was admitted to the hospital July 24, 1943. On July 30th, under general anesthesia, an incision was made over the greater multangular bone and, so far as possible, the numerous loose fragments of the bone removed. A cast was applied to the right hand and forearm.

The patient was discharged from the hospital August 5th in good condition. He returned to the clinic on August 10th, at which time the cast and sutures were removed. The wound was healing well and there was no evidence of infection.

Eighteen days after the operation (August 17), the dressings were removed entirely and exercises were begun. An x-ray was taken on August 24th which was reported as follows:

"Re-examination of the right wrist after approximately one more month reveals most of the fragments of the os multangulum majus to have been removed. A few small nonunited fragments remain anteriorly. There is a generalized decalcification of all the bones of the hand and wrist. Position is satisfactory."

He was treated with whirlpool baths, baking, massage, and exercises, and motion gradually increased. On September 25th there was sixty degrees abduction of the thumb. Opposition of the thumb to within one-half inch of the little finger was possible. He returned to work on October 18th, although there was still some limitation of motion of the thumb.

He was seen again December 17th, at which time it was noted that although there was some tenderness over the operative site, the motion of the thumb was improved. An x-ray examination was made which was reported as follows:

"Re-examination of the right wrist after approximately four more months reveals the fracture of the carpal bone as described previously. There has been no change in appearance since last examination. The position remains the same. The generalized decalcification of all the bones appears to be about the same degree."

The patient was seen last on March 4, 1944. He was still working, and was gaining in adbuction and opposition of the thumb, although slight limitation of opposition remained. Abduction of the thumb was normal, and motion in the metacarpo-phalangeal and interphalangeal joints was normal.

CASE 2.—A. P., white, male, age 23, was admitted to the McMillan Hospital, October 11, 1943, with a gunshot wound of the volar surface of the right hand and wrist which had been self-inflicted accidentally at close range. There was extensive soft tissue destruction of the volar surface of the right wrist and proximal part of the palm, mostly around the thenar eminence. The transverse carpal ligament was torn, the flexor tendons of the thumb and index finger were partially severed, and there was considerable damage to the thenar muscles.

An x-ray of the right hand showed a comminuted fracture of the greater multangular bone. with the fragments in satisfactory position. Shots were evident in the soft tissues on the anterolateral side of the wrist and distal forearm.

Debridement was performed under general anesthesia. The median nerve and the ulnar nerve could not be located. The tendons were repaired, the transverse carpal ligament was sutured with chromic catgut, and the muscles were approximated with plain catgut. Sulfanilamide powder was placed in the wound, and the skin closed over the wound with black silk. There was some tension of the skin in this area which could not be avoided. Combined gas and tetanus antitoxin was given.

The patient's postoperative condition was satisfactory, his temperature ranging from 99 F. to 100.6 F. except for one elevation to 103 F. on the fourth postoperative day. There was some edema of the right hand. Sulfadiazine was given orally for four days and continuous warm epsom salts packs were applied to the right hand and forearm, starting on the third postoperative day and continuing throughout the eighth postoperative day. On the eighth postoperative day the patient's temperature rose to 104 F. and urticaria

appeared. This subsequently proved to be a late serum reaction.

The sutures were removed on the eighth postoperative day and the hand was dressed. There was some separation of the wound due to tension of the skin, with slight necrosis of the skin edges, but there was no evidence of gross infection. The wound healed by second intention. The patient's temperature returned to normal on the evening of the eighth postoperative day and remained normal for the remainder of his convalescence.

Progress was slow but uneventful, except for occasional pain in the hand. The patient left the hospital October 24th, two weeks after the injury. He continued to have his hand dressed regularly by his local physician. When seen four weeks after the accident, the condition of the wound was much improved but there was considerable granulation tissue present. Metaphen ointment was used for dressing and the patient was referred to his local physician for further treatment.

He was not seen again until April 17, 1944, six months after the accident. At this time the soft tissue wounds were completely healed. There was some tendency to claw deformity of the right hand. There was atrophy of the interossei muscles, the muscles of the thenar eminence, and less marked atrophy of those of the hypothenar eminence. Flexion of the metacarpo-phalangeal joint of the right thumb was fairly good, extension was good, but there was almost complete lack of opposition. Passive motion of the metacarpo-phalangeal joint of the thumb was essentially normal. The grip of the right hand was good. Scar tissue had apparently formed between the tendons of the flexor of the thumb and index fingers of the right hand, because there was involuntary correlated flexion of the index finger in the proximal interphalangeal joint upon voluntary flexion of the thumb.

Another x-ray was taken six months after the injury. The fragments were in satisfactory position and healed by callus. Eight shots were noted in the soft tissues.

This man was first examined by the senior author, R. L. A., on May 15, 1944, approximately seven months after the injury. He stated at that time that he had numbness and weakness of the hand, also some stiffness. He stated that the thumb had been numb but that this was decreasing. The remaining fingers were numb. He stated that he had been working for almost four months.

Examination of the right hand showed healed scars on the volar aspect of the wrist. There was no limitation of motion of the wrist. There was atrophy of the small muscles of the hand and some atrophy of the fingers. There was good grip of the hand. He could not oppose the thumb to any but the index finger, and he could not abduct or adduct the fingers. Anesthesia was present over almost the entire palm and the four fingers. There was good sensation on the extensor side of the fingers. Scars were present on the anterior aspect of the wrist. These were irregular and adherent. Abduction of the thumb was limited ten degrees. Adduction was good. There was a slight tendency to clawhand deformity.

Operation on the ulnar nerve was recommended, but was refused inasmuch as the man was working and did not wish to lose any time.

SUMMARY

Isolated fracture of the greater multangular bone is comparatively of rare occurrence. Two such cases are reported.

DEVELOPMENT OF PREFRONTAL LOBOTOMY

When the body is in pain and the mind is tortured by the implications of the pain—by fear, and even the threat of death—prefrontal lobotomy has much to offer. Pain can be divorced from the threat which it carries, and then the anxiety and apprehension disappear. In some cases, such as cancer, this merely makes the pain tolerable. In others, such as tabes dorsalis, in which nervous tension is a precipitating factor, the frequency of lightning pains is reduced and they may even disappear.

All of us have seen patients with pain who are obviously upset by it, but when the cause for the pain is explained, will reply: "As long as I know what is causing it, and it is not serious, I can bear it." The examination by a physician, and his assurance that the pain is not serious is usually enough to put the patient's mind at rest. However, if the pain continues and no cause can be found, or if treatments fail to relieve it, then it becomes a threat, the patient can't get it off his mind, obsessive thinking develops, and the pain becomes the most important thing in his life. Even when the pain is absent, he is waiting for it to strike, he cannot rest, and gradually the fear of pain becomes as dreadful as the pain itself. By relieving the patient of this preoccupation with pain and the dreadful fear which accompanies it, prefrontal lobotomy enables him to tolerate otherwise unbearable pain.—James W. Watts, M. D., and Walter Freeman, M. D., in J. So. Med. and Surg.

ORAL USE OF DRUG IN SYPHILIS CONDEMNED

The oral administration of penicillin in the treatment of syphilis should be mentioned only to caution against its use. This mode of administration will be tempting to the general practitioner under many circumstances, but should be strictly prohibited. Little enough is known regarding penicillin by parenteral administration, and oral use can as yet only be condemned.—G. Marshall Crawford, M. D., in New England Journal of Medicine.

THE NEED FOR WELL-CHILD CONFERENCES AND PRENATAL CLINICS IN WEST VIRGINIA*

By HALLIE ISABEL MORGAN, M. D., M. P. H.,
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Queen Victoria had the happy faculty of surrounding herself with distinguished and able statesmen. One of these, Disraeli, made the following statement, "The health of the people is really the foundation upon which all their happiness and all their powers as a State depend."

Anyone interested in public health could analyze this statement in many ways. Being specifically concerned with the maternal and child health problems of the state of West Virginia, I can construe it to mean that the foundation of good health of the citizenry begins in fetal life and extends through the formative years of infancy, pre-school and school life. Closely associated with the infant's and child's well-being are the guidance and love of a living, happy, healthy mother.

THE TRAGEDY OF THE MATERNAL DEATH

I want to stress the word 'living' in the previous sentence because I call to your attention the fact that while the maternal mortality studies covering the past ten or fifteen years have shown a gradual drop in the maternal death rate, we still have too many tragedies written on the birth and maternal death certificates of the nation, indicating that many mothers who die in childbirth leave large families behind them. This is, in all instances, an economic loss to the community, as well as an irreparable loss to the husband and children. Many of the children must go into orphanages because of the mother's death.

Tragic too, is the large number of neonatal and infant deaths. Experience indicates that the protection of the mother's and infant's health is the direct responsibility of three community groups: the medical profession, the health department, and the expectant parents.

All of us here belong to the second group mentioned, and many are, or have been, members of two or even three of the groups. Since one of the bases of sound preventive medicine is education of the layman, we can be said to have as much an interest in the third group, (i. e., the expectant parents) as the practitioner of curative medicine has. Even in this day of modern chemotherapy the old saying, "An ounce of prevention is worth a pound of cure", still holds.

ROLE OF THE DEPARTMENTS OF HEALTH

Let us consider the role which the state and local health departments play in this community responsibility.

Hiscock says, "The protection of the health of mothers and children is perhaps the most important of all the functions of the health department". It seems unwise to me for any sound public health worker to make such a statement, for all health programs are important and in order to get the best results in a community the various programs should and must fit together like the pieces of a jig-saw puzzle. Hiscock redeems himself by saying that it is "perhaps the most important of all functions of the health department". However, when we take into consideration the fact that in 1940 approximately 60 per cent of this state's population fell into the categories of child-bearing women, i. e., women in the age group of 15 to 45 years, and infants, preschool and school children, it is easy for us to understand the inherent possibilities in a good maternal and child health program. It is also easy to see that our programs would have to be many and varied in order to meet all the needs of these groups. Because of limited personnel and funds the question of priority arises. First demands necessarily take precedence. More will be said about this later.

The local and state health departments always have been close allies of the medical profession and occupy an important place in the community. Each local department can be said to have its finger on the pulse of the community. It is the first to know when the mortality and morbidity rates rise or fall. It is the department's responsibility to determine the causes of such fluctuations and to keep the community posted on these causes.

CHILDREN'S BUREAU

Closely associated with the health departments of the nation are several federal agencies. One of these, the children's bureau, is especially concerned with the maternal and child health and welfare of the country. It might be of interest to give a short summary of the history of this agency.

At the turn of the century the country's death rate was overshadowing the birth rate to such an extent that, if allowed to continue, the very life of the nation would be jeopardized. Since our form of government is set up to serve the people, action seemed warranted. The maternal and infant deaths accounted for a large percentage of the high rate. Because of this as well as other factors, the Children's Bureau was created by an Act of Congress under President Taft on April 9,

*Presented before the Annual Health Conference, at Clarksburg, West Virginia, May 17, 1947.

1912. The Bureau was directed "to investigate and report upon all matters pertaining to the health and welfare of children and child life among all classes of our people".

In the beginning, the Bureau accomplished little except the publication of a few studies. However, with the passage of the Sheppard-Towner Act in November 1921, funds were made available for maternal and infant welfare work in states which made supplementary appropriations. The West Virginia Division of Child Hygiene was organized by legislative action in 1919, and reorganized as the Division of Maternal and Child Hygiene under the Sheppard-Towner Act in 1923.

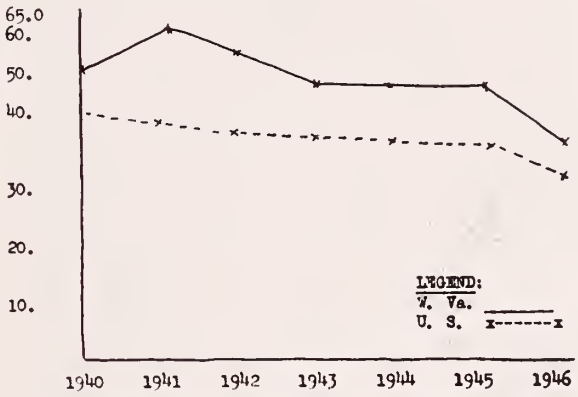
Today, the Children's Bureau, through Title V of the Social Security Act has a great deal to offer the state department of health in the way of financial assistance and consultation service. The Bureau formulates a standard on which the directors of divisions or bureaus of maternal and child health base their programs. These programs are sent to the Children's Bureau for approval. Once approved, the state division or bureau is given the aid in carrying out its program which it has requested.

INFANT AND MATERNAL DEATH RATES

State programs of maternal and child health are of great importance to the state and local communities. Many illnesses, mental as well as physical, encountered in adult life can be traced back to childhood, and even to the period of gestation. This leads us up to West Virginia's specific need for two maternal and child health programs, namely, prenatal clinics and well-child conferences.

As I have already mentioned, every program has its priorities due to limitation of funds and personnel. In order to ascertain these priorities the public health worker, upon entering a new area, should make a careful study and analysis of problems existing within that territory. On superficial examination it seemed to me that my first efforts should be centered upon the study of infant deaths in West Virginia, the infant mortality rate being far above that of the United States as a whole, and placing West Virginia fourth highest of all states in infant death. I attempted an analysis of infant deaths, but soon found that it was impossible to separate the maternal and infant deaths, due to a rather unique situation which exists in this state. As a rule, the infant deaths are directly dependent upon the number of maternal deaths, i. e., the lower the maternal death rate, the lower will be the infant death rate. Such is not the case in West Virginia as is indicated by graphs I and II.

Graph I shows the rise of the infant death rate from 53.9/1000 live births in 1940 to 61.1 in 1941. A gradual fall to 52 in 1943 and the maintenance of a plateau during the following three war years is evident. A decided drop to 41 in 1946 is encouraging and leads one to suspect that the return of our physicians to private practice from World War II may be the main reason for this. We are still above the U. S. average of 36. (This is a provisional figure.)

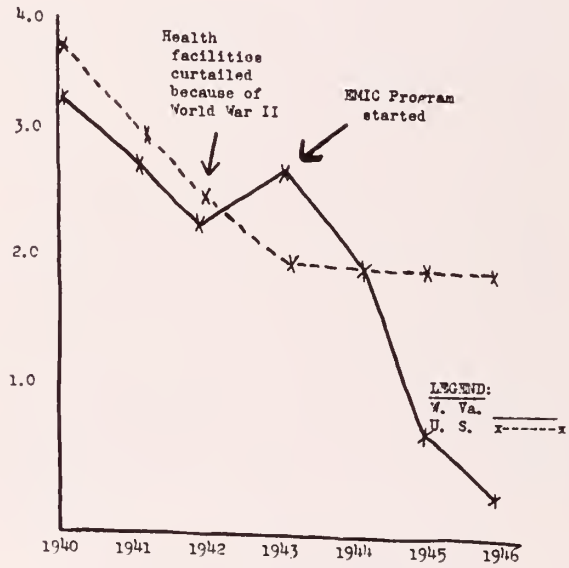


GRAPH I

Infant Mortality Rates—Per 1,000 Live Births
West Virginia: 1940-1946 Inclusive
Compared with United States: 1946 Rate Provisional

Graph II, showing the maternal death or mortality rate over the similar seven year period (1940 to 1946, inc.), is much more dramatic. The high of 3.3/1000 live births in 1940 falls to 2.3 in 1942. One of the factors of this steady decline over a two year period undoubtedly was due to the advent of the sulfonamides into the doctor's armamentarium, thus causing a lessening in the number of maternal deaths due to septicemia. From 1942 to 1943 an abrupt rise to 2.9 followed the entrance of our country into World War II with the subsequent enlistment of our health personnel into the armed forces. However, the inception of the federal Emergency Maternity and Infant Care program has caused a continued and steady drop to the 1946 all time low of 1.5 deaths per 1000 live births. The EMIC program not only took care of many of the young mothers in the lower income groups but also was a wonderfully effective educative measure in teaching these young women the value of health care. The question now is, will the maternal and infant death rates rise again with the fading out of the emergency program? Another question is, why did not the infant death rate show as steady a drop as the maternal death rate? One answer could be that the pediatric care afforded the sick infants of service men under the EMIC program has not been utilized to its fullest extent in West Virginia. Another reason for the continued drop

in the maternal mortality rate is the addition of the sodium salt of penicillin to the pharmacopia and its ability to combat the small percentage of septicemias due to sulfa-resistant hemolytic streptococci and the gram-positive group of bacilli.



GRAPH II

Maternal Mortality Rates—Per 1,000 Live Births
West Virginia: 1940-1946 Inclusive
Compared with United States: 1940-1945 Inclusive

I have stated already that West Virginia has a unique position but have not named it. It seems from our data that West Virginia mothers have their babies fairly easily and safely but that they also lose them easily and early.

Does the high infant mortality rate indicate that something is lacking in the care of West Virginia's mothers-to-be, thus robbing their infants of a fair chance at life? Analysis of data obtained through the cooperation of the division of vital statistics of the state department of health would indicate that such is the case. This data, which covers the years 1943 to 1945 inclusive, points out that 60.6 per cent of the infant deaths (under 1 year of age) are due to prenatal and natal causes. These causes include deaths due to prematurity, birth injuries, congenital malformations, congenital debility, congenital syphylis, atelectasis, et cetera. Prematurity stands first in the list of the ten leading causes of infant deaths with gastrointestinal and respiratory causes, i. e., the pneumonias and influenza, in a photo finish for second and third places. All other causes include whooping cough and accidental deaths.

Upon study of the neonatal causes of death (deaths under 1 month) we find that 85.7 per cent of these are attributable to prenatal and

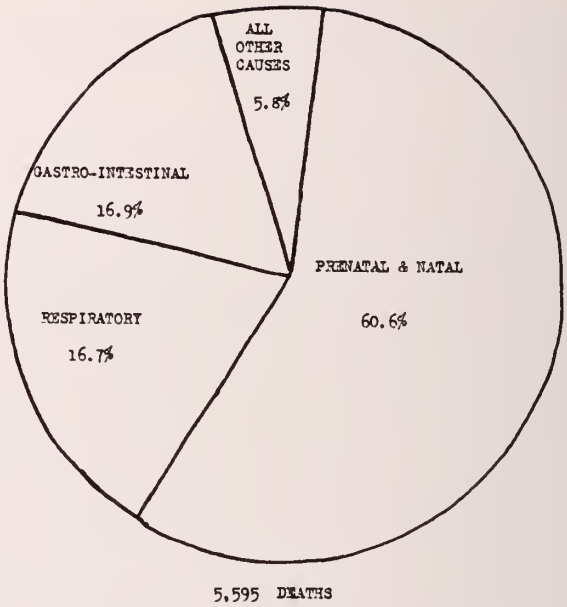


CHART I

Distribution of Infant Deaths By Causes and Per Cent,
1943-1945, Inclusive: West Virginia

natal causes with prematurity again in first place. Ninety-five and six-tenths per cent of premature deaths occurred during the neonatal period. Congenital malformations and birth injuries are in second and third places. Approximately 60 per cent of all infant deaths occurred during the first month of life.

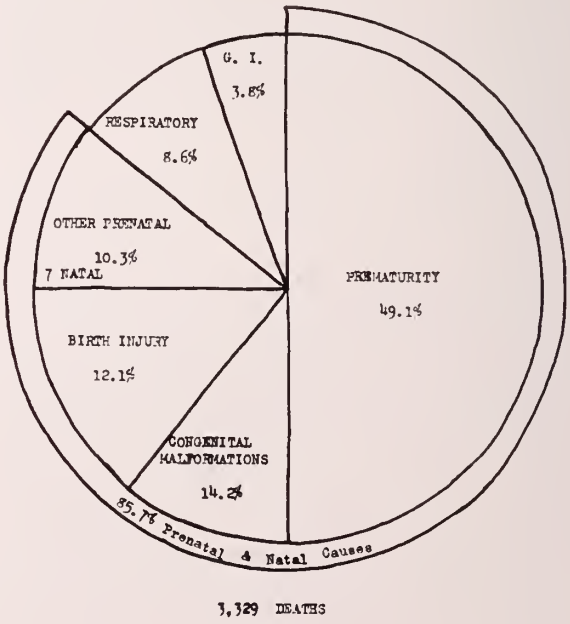
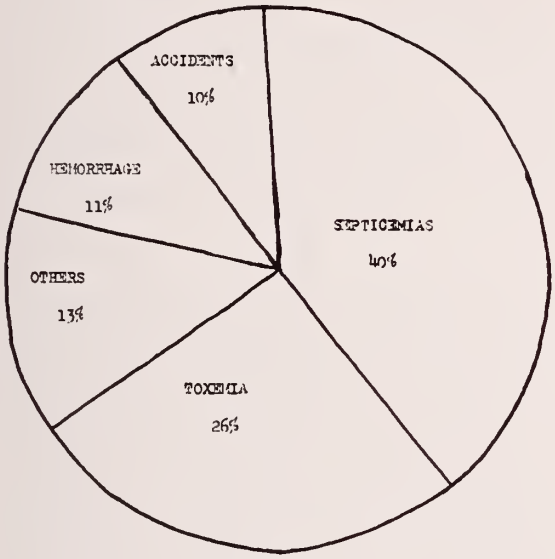


CHART II

Distribution of Neonatal Deaths By Cause and Per Cent,
1943-1945, Inclusive: West Virginia

The latest research points out the fact that the largest percentage of neonatal deaths can be prevented by good prenatal care.

Upon careful review of our data concerning maternal deaths, the following charts may show us our weaknesses:



7,380 DEATHS

CHART III

Distribution of Specified Causes of Maternal Deaths By Percent, 1927-1928 Inclusive: 15 States Study; Children's Bureau

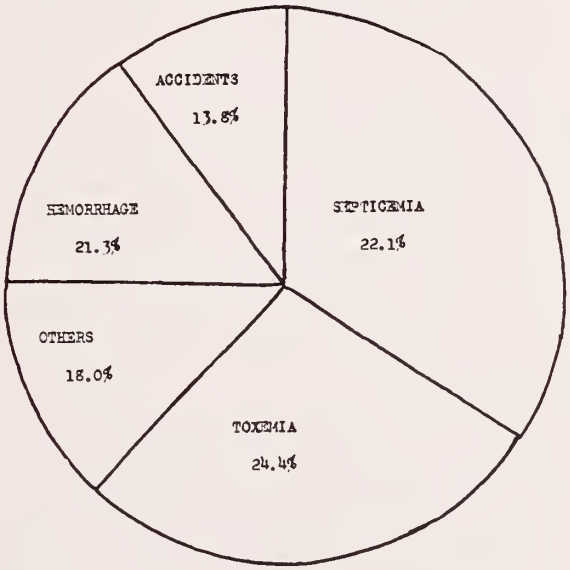
Here we find the infamous triad, septicemia, toxemia and hemorrhage, in their accustomed places among the causes of maternal deaths, with septicemia far out in front. Our last illustration (chart IV), however, shows us a great change has taken place in an eighteen year period. You will note that the preceding illustration is not exactly comparable with our last illustration, since this last is a true picture of West Virginia's problem, while the preceding illustration represents a cross-section of the country as a whole. Thus, we are able only to view a trend in changes over the eighteen year period. The number or distribution of maternal deaths as to cause prior to 1942 is not available in this state.

The trend indicates that which we would expect: the fact that deaths due to septicemia have been drastically reduced undoubtedly by the sulfonamides and penicillin. Now we find septicemia (the diagnosis of which just one hundred years ago would have been tantamount to a death sentence), instead of being far out front as a killer of our mothers, running a photo finish with the other two members of the triad. In this illustration we find toxemia ranking first, septicemia second, and hemorrhage third.

Thus, curative medicine seems to be waging a winning battle against septicemias of pregnancy but preventive medicine does not appear to be attacking very vigorously the problem of toxemias of pregnancy which accounted for approximately one-fourth of the maternal deaths eighteen years ago and still does in this enlightened era.

Toxemias of pregnancy, also called puerperal albuminuria and puerperal convulsions, include a number of related pathologic conditions. Williams,* in speaking of the normal pregnancy, points out indirectly the reason for good prenatal care. He says, "From a biological point of view, pregnancy and labor represent the highest function of the female reproductive system, and *a priori* should be considered as a normal process. But, when we recall the manifold changes which occur in the maternal organism, it is apparent that the borderline between health and disease is less distinctly marked during gestation than at other times, and derangements, so slight as to be of but little consequence under ordinary circumstances, may readily be the precursors of pathological conditions which may seriously threaten the life of the mother or the child or both."

Toxemias not infrequently are associated with overweight, and with advanced age, and are more frequent in primiparas than in multiparas, the ratio being about three to one. Disturbances of this nature are associated with the late rather than the early part of pregnancy. Many pregnant



385 DEATHS

CHART IV

Distribution of Maternal Deaths By Cause and Per Cent, 1942-1946, Inclusive: West Virginia

women in the rural areas (and this is especially applicable to our state since we are 70 per cent rural) do not approach a physician until labor pains start, or until a diagnosis of eclampsia is

*Williams, J. W., Obstetrics, Ed. 6, New York, D. Appleton & Company 1930, p. 247.

made. The infant loss in the latter group is about 20 per cent.

CLINICS AND CONFERENCES

Thus, if we could establish throughout our state prenatal clinics and first of all teach our women and physicians their value, we could really attack the problem and witness some gratifying results. I am sure that our rural physician will welcome us because of his already overwhelming burden. He must be made to realize that our business is to supplement his work and to teach the women of West Virginia the value of health care. The same should be true in the urban centers of the state.

Prenatal clinics can aid also in combatting deaths caused by hemorrhage, and infant deaths due to erythroblastosis fetalis, by ascertaining immediately on the mother's first visit to the clinic her blood type and RH factor, and by making certain her nutritional status. This information will be invaluable at the time of her delivery. Also, the syphilitic mother can be discovered and treatment started immediately. The tuberculous mother can be saved.

As has already been indicated in this paper, the main or leading cause of infant deaths in the state is that of prematurity. Poor nutrition of the expectant mother has been shown in many studies made on this subject to be the chief factor here. The economic status of the family plays an important part in adequate nutrition, but education also plays a very big part since those in the higher income brackets sometimes suffer through ignorance as often as their poorer sisters. With this knowledge an effort is being made by the division of maternal and child health to build a competent nutrition consultant service as a part of the division.

Ideally, the well-child conference should be as active in the community as the prenatal clinics and we should work toward that goal. The expectant mother in the prenatal clinic should be taught the slogan "Keep the well child well." Let her understand before her baby is born that she has a place where she may bring her well infant and child (from one month to six years) with the many problems which will arise during the child's development. Teach her the value of counselling coupled with a periodic physical examination, and important immunization. Keep the premise in mind that abnormalities discovered early will yield better to curative treatment given by some competent physician. Educate the profession to understand the philosophy behind the well-child conference and to know that no ill child is treated.

I realize the thoughts which all of you are flashing in my direction. "What she says may be true, but how are we to handle this gigantic assignment with our lack of personnel and facilities." I have given this problem much thought and I believe the answer is 'community responsibility'. Approach your civic and professional groups after you have carefully planned your strategy. Educate them kindly and wisely as to your needs and community pride will back you.

SUMMARY

The high incidence of infant deaths in the state of West Virginia presents a grave problem to the division of maternal and child health of the state department of health. It appears that the infant deaths, in a large measure, are directly dependent upon lack of prenatal care, especially among the lower income groups. This lack will have to be combatted intelligently from local, state and federal levels and can best be done by each county and district analyzing its own needs and developing its own program. Of course, our division stands ready to aid in any way it can, as does the Children's Bureau.

Professional and civic groups must be educated to the needs of the community so that they will shoulder the responsibility of an effective program.

The system of record keeping in each county and district should be carefully reviewed. It appears from my own survey that there is a great discrepancy here. In other words, the data we do possess indicate a mammoth problem, but apparent discrepancies in recording or lack of recording would indicate that an even greater problem exists.

The chips are down. We have the challenge. Together we can give the mothers of West Virginia the possibility of happy motherhood and the babies of these mothers the chance to live and be healthy.

STREPTOMYCIN IN TULAREMIA

Streptomycin is an extremely effective therapeutic agent in tularemia. It is so effective that it causes analogues of the Herxheimer reaction in most patients who have infected cellular or fluid exudates of any considerable size. Critical examination of the patient as well as the demonstration of a fall in the serum agglutinin titer should distinguish this reaction from relapsing or recurrent tularemic symptoms. If streptomycin is administered in the recommended dosage it is very unlikely that a relapse could occur. Much of the recent mortality caused by tularemia has been prevented by early therapy, even some that was due to fulminant infections which, until recent years, have seldom been associated with survival.—Lee Foshay M. D., in J. Indiana St. Med. Assn.

TUBERCULOSIS ABSTRACTS*

THE VALUE OF CHEST X-RAY SURVEY IN DIAGNOSIS OF HEART DISEASE

A chest x-ray survey may be of considerable value in the discovery of heart disease in addition to abnormal pulmonary conditions. There are various cardiac lesions which may cause changes in the contour of the cardiac silhouette or in the prominence of the great vessels. It is true that individuals with a serious heart disease such as arteriosclerosis of the coronary arteries may have entirely normal cardiac shadows in the x-ray film. Certain cardiac abnormalities which are detected by other forms of radiologic examination may not be apparent on the posterior-anterior view obtained in the routine chest film. Although it must be admitted that the x-ray survey cannot be 100 per cent effective in detecting individuals with cardiovascular disease, it may be a very useful device.

Enlargement of the left ventricle may be detected by the chest x-ray and may be due to any one of the following causes: hypertensive heart disease, arteriosclerotic heart disease, chronic rheumatic valvular heart disease with aortic stenosis and/or insufficiency, luetic aortic insufficiency and other less common cardiac lesions. Localized enlargement of the lower left cardiac border may be found in aneurysm of the left ventricle following coronary thrombosis with myocardial infarction. Right ventricular enlargement may be manifested by an increase of the heart shadow to the right of the midline. Commonly, however, moderate or even marked enlargement of the right ventricle may cause an increase in the heart shadow to the left. The posterior-anterior projection does not always, therefore, in itself give adequate information as to which chamber of the heart is enlarged.

An increased prominence of the pulmonary trunk and pulmonary artery shadow on the superior portion of the left heart border may be found in mitral stenosis, interauricular septal defect, patent ductus arteriosus, pulmonary arteriosclerosis, chronic cor pulmonale and thyrotoxicosis. It may also be present when the left side of the heart has decompensated as in hypertensive heart disease.

Relatively diffuse cardiac enlargement may occur in myxedema, thiamine deficiency, anemia and myocarditis. In myxedema, the cardiac contour may be globular.

Pericardial effusion may be manifested by cardiac enlargement to both right and left with fairly convex lower heart borders. Chronic constrictive pericarditis may be suggested by deposits of calcium seen in the cardiac shadow. Distention of the vena cavae may be caused by constrictive pericarditis and may be detected on the routine chest film.

Abnormalities in the thoracic aorta may be found in a survey. Arteriosclerotic or syphilitic aneurysm of the aorta may present a striking x-ray appearance. Lesser degrees of tortuosity and ectasia may commonly be seen in adults of the older age groups. Deposits of calcium may be seen in the aortic knob. Decreased prominence or absence of the aortic knob may suggest coarctation of the aorta. This is especially true if scalloping of the rib margins and left ventricular enlargement are present. Abnormalities in the origin or course of the aortic arch may also be found.

Congenital cardiac lesions may be detected also in a survey. The tetralogy of Fallot may be suggested by the combination of the peculiar boot-shaped heart plus the anemic appearing lungs. Interventricular septal defects may cause enlargement of both the left and the right ventricle. Dextrocardia will be evident by the striking x-ray appearance of the chest. Other congenital cardiac lesions have been mentioned above.

It is essential that those individuals whose routine x-ray films show cardiovascular abnormalities be referred to their physicians for further studies. Only by obtaining a careful history and physical examination and by making judicious use of the electrocardiogram, other forms of radiologic examinations, and other laboratory procedures can an exact diagnosis be arrived at and proper management instituted. It is possible that some completely curable cardiac lesions may be discovered by the survey. The health of other individuals with cardiac disease may be preserved by regulating activity to an optimum level and by applying appropriate therapeutic measures.

The value of a survey to the health of a community is impossible to estimate. It will depend in large measure on how well the physicians of the community perform the task of arriving at an exact diagnosis and advising appropriate therapy.

The Value of Chest X-ray Survey in the Diagnosis of Cardiovascular Disease, George N. Aagaard, M.D., The Journal-Lancet, June, 1947.

RABIES

Most Americans have a warm spot in their hearts for dogs, and the dog is frequently referred to as man's best friend. As we consider his usefulness in hunting, for protection, or as a playmate, not many will dispute this latter statement. It must be accepted, however, that the dog or other valued animals, when infected with rabies, may suddenly change to man's worst enemy. When this tragedy occurs the rabid animal may attack all who come within his range, necessitating expensive and painful emergency medical care for all involved.

During the seven year period, 1940-1946, rabies is responsible for the horrible death of 225 Americans, men, women and children. Six needless deaths occurred in Virginia during the past eight years. When treatment is required subsequent to animal bite, the economic loss in medical care and in time is an appreciable major factor in this problem, and this does not include the physical and mental distress resulting from the injury. It is conservatively estimated that the nation suffers an economic loss in excess of $200,000 per annum through animal rabies. From the view point of the individual owner and the community this loss is frequently a serious matter.

The problem in Virginia is sufficiently important to necessitate immediate legislative and administrative action. Responsibilities for control and prevention should be placed in one department empowered with sufficient authority to continuously operate an approved program. Such states as Massachusetts and New York and abroad, England and Australia, have practically eradicated rabies through effective programs.—W. A. Browne, M. D., in Virginia Medical Monthly.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Association.

The President's Page

My visitations to the different medical societies of the state are most interesting to me. The unexpected receptions and the "out-of-the-way" courtesies extended to Mrs. Bess and me are experiences which will never be forgotten. Meeting old friends and greeting new ones well repays me for the travel and difficulties of bad weather encountered.

In the past, I have attended medical meetings where specialists were in the majority, and, of course, I enjoy seeing them in their normal home environment; but, now I have a grand opportunity to see the general practitioner. Many travel long distances to attend a medical society meeting, and on some occasions I have been informed that all their members were in attendance for my visit. Of course I feel greatly honored, but I have so little information for them that I question the precedent I am making by trying to visit all of the medical societies in West Virginia. Well, for me it is well worth while, and I hope some of you can say the same.

On Sunday, February 8, I attended the 21st Annual Meeting of the National Conference on Medical Service in Chicago, and I was very much interested in the program pertaining to the general practitioner—whether we should have more doctors, and if our present admission requirements for medicine are too high.

Speaking of the general practitioner, many of our West Virginia boys have contributed much in that particular field of medicine. Looking back over the years—forty or more—I can remember a wonderful personality who deserves all the praise that modern medicine can bestow upon him. From my childhood I can remember this hardworking small-town and country practitioner who, at the sacrifice of personal health, gave unselfishly of all his wealth of knowledge that so many of us today could enjoy the pleasures of good health and the memories of such a fine character in our profession. To know such a great humanitarian and remember the smile he wore during his hardest years of practice, and to hear hundreds of patients today still singing his praises, surely makes one feel a sense of personal pride to belong to such a profession as ours, and enjoy the association of such a fine gentleman.

We often speak of following the footsteps of one we admire, but this particular physician had shoes built for one individual, and I sincerely doubt that any of our youngsters today would attempt to trod over the town and mountains as did this able doctor.

After years of general and successful practice, hard study and numerous post-graduate courses in surgery, this small-town doctor moved to one of our larger cities, limited his practice to surgery, and, as fate would have it for a man of his character and endurance, he was most successful.

Upon the occasion of my visit to the Parkersburg Academy of Medicine, it was my pleasure, in company with the president of the Academy, to call upon my old friend, who has retired on account of illness. I was happy to see the same old smile of 45 years ago, and the same typical greeting of old, "Hello Tom." He inquired about all of our old mutual friends, never referring to the illness that completely incapacitates him. When I left him I remarked, "Here is the ideal physician and surgeon, truly a great humanitarian, one who never took up the study of medicine as a business, but sincerely as a way of life."

I am referring to a past president of the Parkersburg Academy, past president of the State Medical Association, a member of leading surgical societies, and an outstanding citizen of Parkersburg, West Virginia,—my friend, ROY BEN MILLER.

Thomas Bess

President.

West Virginia Medical Journal

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MEDICAL EDUCATION

At the recent meeting of the Congress on Medical Education and Licensure in Chicago, the entire subject of medical education was gone over thoroughly. The impressions we gleaned from the complete program may be summed up as follows:

Much more money is needed for the medical colleges of this country, and still more for the remainder of the world. In the United States, forty million dollars per year would be needed to bring the finances of medical education to an ideal standard. Present budgets should be approximately doubled. Private philanthropy will have to furnish much of the money needed, especially for the privately endowed medical schools. The greatest financial burden of medical education now is the deficit of the teaching hospital, and the cost of the actual patient care should be budgeted as medical care to the indigent rather than as medical education.

By 1960, the physician requirement, to keep pace with the population increase, will be 225,000, but at the present rate of output, there will be only 210,000, although new medical schools now planned will increase this number considerably.

Are the standards of medical education in this country too high? To this question, Dr. Andrew C. Ivy, one of the leading medical educators of the entire world, answered, "Categorically, no." Everyone else agreed with him that to maintain satisfactory medical care, the present standards should be continued.

A trend running through the entire meeting was the necessity of revamping medical education to furnish more family doctors. Estimates of the ideal ratio between specialists and general practitioners ranged from one in three to one in seven. Especially noteworthy efforts are being made at Bowman Gray, Colorado, and Minnesota, to train men for general practice.

Medical education outside the United States and Canada is far below that extant in these two great democracies. The medical schools of Latin America, with a very few outstanding exceptions, do not approach those north of the Rio Grande. In one South American country, fifty per cent of children born die before the age of nine.

In Central Europe, notably Germany and Austria, medical education is in a pitiable plight. There is no limitation on the number of matriculates, and admission is dependent upon political pressure rather than upon preparation, aptitude and scholarship, and as a result, approximately one-half the students in the universities are in the medical schools. The number of students in the various medical schools range from 1,200 to several times that number.

We were impressed with the fact that, despite some faults, American health, medical education and medical care are far superior to medicine anywhere else in the world. And yet there are those in high places in Washington, even the President, who would wreck this beneficent structure by the compulsory socialization of medicine. "*O di immortales! Ubinam gentium sumus?*"

HUNTINGTON IN MAY

All signs point to another successful annual meeting in May. The program already lists as speakers many doctors of outstanding ability, professional men from various parts of the country who have proved their worth and established a national reputation in their respective fields of medicine and surgery.

For the third time in six years, Huntington again is to serve as host to the West Virginia State Medical Association. The date is May 10-12, and advance reservations for rooms are much heavier than when the meeting was held there in 1946.

Never before has there been such a demand for spaces for technical exhibits. Even though

these exhibits have to be separated from the scientific meetings, exhibitors look forward to a successful meeting, as evidenced by the fact that all spaces were disposed of six days after the floor plan was opened.

There are still a few rooms left at Huntington hotels and we would suggest that reservations be made now. The local housing committee will help members find satisfactory accommodations. Huntington welcomes this convention, and the Cabell County Medical Society and Auxiliary are going all out with the State Medical Association to make the three-day meeting a stand-out among state medical conventions held in 1948.

HONORING DR. McELFRESH

We have nothing but praise for the good people of Mason County who are planning to honor, in his lifetime, a noble soul who has administered to their medical needs for over half a century. We refer to Dr. Edward McElfresh, of Point Pleasant, who on March 5, 1948, will celebrate the fifty-fifth anniversary of his practice in Mason County. Two days later, the citizens of his community will meet in Point Pleasant to pay tribute to their friend and family doctor.

Doctor McElfresh is beloved and respected by his fellow townsmen, and his influence extends far outside the sphere of medicine. Always active and keenly interested in civic affairs, he has helped build his community.

One of his friends has said of Doctor McElfresh, "He has been true to his God. He has bound friends to his heart with lasting ties. Most of his earthly compensation has been in the blessings he has received from those he has helped, from the silent handclasps more eloquent than words, and from the wordless glances of unspoken gratitude. He has filled his niche and tried to be about his Master's business. He has the respect of people in all walks of life who know him."

In a recent issue of the Point Pleasant Register a letter from a patient of Doctor McElfresh is printed in full, and in this letter the writer says that there is not a spot in Mason County where at some time or other "this good man has not gone to relieve sickness or to bring a baby into the world. The weather was never an obstacle to him. He has never failed to go when he was summoned to help some suffering soul."

Doctor McElfresh deserves all that has been said of him, and we join with his thousands of friends in wishing for him continued good health and many more years of useful service.

LIVING LONGER

The analysis of the costs of medical care made by Frank G. Dickinson, Ph. D., director of the bureau of medical economics of the American Medical Association, was discussed in a recent editorial appearing in the *Clarksburg Telegram.*

After quoting Doctor Dickinson as saying that Americans are living longer, the *Telegram* has this to say concerning modern treatment as compared with methods used not too many years ago:

> "Not so very long ago appendicities was treated with opium pills and poultices. This form of treatment was cheap — but most of the patients died. The diabetic was given codeine and put on a diet. Again, the doctor's charges were low — but the patient soon departed this world. The enormous progress made in medical standards, and the ever-growing complexity of treatment, has naturally added to the cost — as does anything which contributes to modern living in all its phases.
>
> "In the palmy days of the Roman Empire the average lifetime was about 25 years. By 1700 it had risen to 33 years in the most advanced nations of the time. Now it is 67 years. Better medical care, of course, is not the sole reason for increased longevity, but it is one of the important factors."

The growth of prepaid medical plans in this country is noted by the editorial writer in the *Telegram.* These plans have made it possible, he says, for the majority of Americans to anticipate doctor and hospital costs by paying small monthly sums. That small proportion of our people who are so poor that they can not pay anything at all can be cared for by public agencies.

In the closing sentence of the editorial, this strong central-state daily takes a firm stand against socialized medicine: "The country does not want or need grandiose compulsory medical schemes that would cost billions a year and subject the doctor to political whims."

MEDICAL PUBLIC RELATIONS

At the recent meeting of the National Conference on Medical Service, in Chicago, Dr. Fernald Foster, Secretary of the Michigan State Medical Society, discussed the topic, "Medical Public Relations Begins in the Doctor's Office." He stressed the obvious fact that the individual physician can do more to create good will for the cause of medicine in his daily contact with his patients than can all the public relations committees and experts put together. A second point he made was that many of the troubles which now plague organized medicine are the result of "the *mis-practice* of the iniquitous one per cent of the profession."

We are in entire accord with each of these points. In the vernacular of the street, medicine

is "on the spot" and will be for a long time to come.

The ethics of the profession are of the highest, and the accomplishments of medicine, especially in the United States, loom larger than at any time in history. But despite these things, the lay public is inclined to be critical of the organized profession. Hence, it behooves each individual doctor to be tolerant and exercise understanding with his patients, and to remember, as Doctor Foster put it, "if any mistakes are made in the setting of fees, it is better to err on the side of undercharging rather than overcharging."

THE RED CROSS, 1948

It is hardly necessary to remind our readers and the public generally that the American Red Cross this year needs "greater sums for an equal job." A great deal of figuring is necessary in estimating a campaign goal. Statistics of past campaigns, unpredictable needs of the coming year, and definite plans for community well-being must be taken into consideration.

In its steadily increasing emphasis on a peacetime program, the Red Cross is expanding its work for veterans and their dependents. At the same time it is maintaining its traditional services to the armed forces and civilians.

Nearly 100,000 persons received emergency help and rehabilitation following disasters during the past fiscal year. In the first ten months of 1947 alone, relief appropriations were approximately $9,500,000. Financial assistance to veterans, service men, and their dependents totaled $11,944,365 for the year. Numberless persons were served by Volunteer Special Services workers, who gave 25,000,000 hours of their time.

Since the Red Cross in 1914 began its program to "waterproof" America, the nation's drowning rate has been cut in half. Similarly, the 11,230,000 certificates issued since the first aid program was instituted in 1910 furnish impressive evidence of the number of beneficiaries of these services.

The National Blood Program, when fully established, will make whole blood and its derivatives available without cost to all of the people of this country.

There is no doubt that the future will bring further opportunities for service, which will be met with even greater response and success. Efforts for the year 1948 are uncertain and unpredictable. Yet standing by, ready for any emergencies, is the Red Cross with millions of organized workers to carry on its manifold services.

We repeat, "this year greater gifts are needed for an equal job."

General News

COMMITTEES HARD AT WORK ON PLANS FOR ANNUAL MEETING AT HUNTINGTON

As the time draws near for the annual meeting of the West Virginia State Medical Association and Auxiliary, it becomes increasingly clear that the convention this year will rank with the best that have been held at any time in the past.

Getting off to an early start, the Scientific Work Committee, with the aid of the chairmen of sections and affiliated societies and associations, mapped plans that will eventually mean the appearance on the program of many speakers of outstanding ability and prominence.

No particular specialty has been favored, and most of the papers will be of interest to general practitioners as well as those engaged in limited practice.

Breakfasts and Luncheons

Round table breakfasts will provide an unusual feature this year. These breakfasts, which will be sponsored by various medical groups, will be held early in the day to permit general discussion of papers presented by guest speakers. While definite arrangements have not been completed, it is known that the breakfasts will be scheduled to begin promptly at eight o'clock and end by nine-thirty, when general sessions will get under way.

The usual section and society luncheons will be held, as well as dinners sponsored by special medical groups. The annual dinner meeting of the Medical College of Virginia Alumni is scheduled for the second evening of the meeting.

Scientific Sessions and Exhibits

All scientific sessions will be held in the ballroom at the Hotel Prichard. Scientific exhibits will be arranged in the Bridge Room at that hotel. Space for these exhibits is being allocated by the Committee on scientific exhibit, which is composed of Dr. Hugh Myers, of Philippi, chairman, Dr. Chauncey Wright, of Huntington, and Dr. Melford L. Hobbs, of Montgomery.

WANT A ROOM?

A few rooms are still available at some of the Huntington hotels for the 81st annual meeting of the West Virginia State Medical Association, May 10-12, 1948. Members should make reservations directly with the hotel of their choice.

Five Huntington hotels are cooperating in plans for the convention: The Frederick, Fifth Avenue, Governor Cabell, Huntington, and the Prichard.

If satisfactory rooms can not be obtained, members should communicate immediately with Dr. James R. Brown, Chairman of the Housing Committee, 1119 Sixth Avenue, Huntington.

Technical Exhibits

The 35 technical exhibits will be set up at the Hotel Governor Cabell. Every inch of space on the mezzanine and in the adjoining ballroom will be utilized, and the display promises to be one of the best ever arranged for a medical meeting in this state.

Registration

The registration desk will be on the mezzanine at the Governor Cabell, and the usual custom of opening the registration on the Sunday afternoon preceding the meeting will be followed this year.

All Auxiliary functions will be held at the Frederick hotel, including the annual luncheon.

Tennis and Golf Tournaments

It is probable that tennis and golf tournaments will be held in connection with the meeting, and these tournaments will get under way on Sunday, March 9. Several special meetings and luncheons are being arranged, and full information concerning all social affairs will be available by early April.

STATE CANCER SOCIETY TO MEET

The annual meeting of the West Virginia Cancer Society will be held in Charleston, Friday, March 19, and will be followed by the annual dinner that evening. Participation in the meeting is limited to those who contributed as much as $5.00 during the past year to funds for cancer control.

According to Mrs. John S. Harvey, of Huntington, Commander of the Field Army, the annual meeting of the board of directors and the state executive committee will be held on Friday. Officers for the new year will be elected at these meetings, including a new secretary of the executive committee to succeed Dr. Paul R. Gerhardt, who is now director of the State Bureau of Cancer Control, Albany, New York. Work Shop meetings will be held Saturday morning, March 20.

Dr. Charles S. Cameron, medical and scientific director of the American Cancer Society, will be the guest speaker at the annual dinner.

PHC TO MEET APRIL 5-7

The spring meeting of the public health council will be held at the Daniel Boone Hotel in Charleston, April 5-7, 1948, for the purpose of examining applicants for licensure in West Virginia.

STATE DOCTORS IN CHICAGO

The following West Virginia doctors attended the annual meeting of the Congress on Medical Education and Licensure, held February 9-10, in Chicago: N. H. Dyer, State Health Commissioner; Edward J. Van Liere, Dean, West Virginia University School of Medicine; and Walter E. Vest, President of the Public Health Council.

TRIBUTE TO BE PAID DR. McELFRESH FOR 55 YEARS' PRACTICE IN MASON

Dr. Edward McElfresh, of Point Pleasant, will complete fifty-five years of medical practice in Mason County on March 5, 1948, and plans have been made for a county-wide observance of this important anniversary in his life.

He was born December 7, 1869, at Hanover in Licking County, Ohio. He attended public schools in his home town, and received his M. D. degree in 1893 from Starling Medical College (now Ohio State University School of Medicine), in Columbus.

Doctor McElfresh was licensed to practice medicine in West Virginia in 1893, and located at Henderson, moving three years later to Point Pleasant, where he continues in general practice today.

The citizens of Point Pleasant and Mason County have arranged a fitting program for Sunday afternoon, March 7, at the State theatre in that city. The program will begin at one o'clock and Dr. McElfresh will have the seat of honor on the stage. Many of his confreres from Mason and adjoining and adjacent counties will be present. Dr. C. E. Holzer, of Gallipolis, will preside as chairman. Robert H. Ferguson, county superintendent of schools, is chairman of the committee on arrangements.

Dr. Edward McElfresh

A biographical sketch of Doctor McElfresh has been written and will be read in all of the schools of Mason County on Friday, March 5. The sketch, which was prepared by Mr. Ferguson, points out that in the early years of his work, Doctor McElfresh "had to travel on horseback or buggy. In many cases, small streams had

to be forded and larger ones crossed by rowboat. Money was scarce. His greatest triumphs over death and disease were never made known. Yet, for fifty-five years, Doctor McElfresh has fought his battles quietly and modestly, respecting all confidences. In moments of extreme sorrow, he has given the greatest comfort to the saddened ones in a spirit of humility and faith."

Continuing, Mr. Ferguson points out that Doctor McElfresh "has traveled to visit the sick at all hours of the day and night, in good or bad weather, and over all kinds of roads. He has never asked for money and has never sent out bills for his services. He has been an influence for good in his community by noble example. He has done no advertising or brilliant things to bring the recognition and plaudits of the multitude, but has quietly and efficiently done the little things that make life worth living in a true manner of greatness. He has never sought position, but when drafted into any official capacity, as the city council, has done his duty as a good citizen in an irreproachable manner. Modesty, devotion to duty, honesty, and sincerity have made up the fabric of the life of Doctor McElfresh."

During World War I, Doctor McElfresh served as Captain in the medical corps of the United States Army. He served as president of the Mason County Medical Society for a number of terms, and is a member of the West Virginia State Medical Association and the American Medical Association.

PREMATURE NURSERY IN OPERATION

The premature nursery, established at the Herbert Thomas Memorial hospital in South Charleston, sponsored by the state department of health, was officially opened February 16. Incubators furnished by the division of maternal and child health have been placed in the pediatric ward of the hospital.

The nursery, provided for the use of doctors in Kanawha county, is a demonstration center. Dr. N. H. Dyer, state health commissioner, has stated that if it proves successful, other premature nurseries will be established throughout the state in an effort to reduce the high mortality of prematures in West Virginia.

The new nursery will be used as a training center in this type of work. Preference will be given graduate nurses until space and personnel permit the training of a larger group.

The nursery at the Herbert Thomas Memorial hospital is in charge of Miss Mary Alice Sinclair, who has received special training in Chicago for this work under the auspices of the state health department.

AMERICAN ASSOCIATION OF BLOOD BANKS

The American Association of Blood Banks was formally organized late in 1947 at a meeting of the Blood Institute, in Dallas, Texas.

This new association is prepared to offer advice and help in setting up blood banks wherever needed. It is the purpose of the officers to work closely with local medical societies and the state medical associations.

Communications should be addressed to Marjorie Saunders, LL.D., Secretary, American Association of Blood Banks, 3301 Junius, Dallas 1, Texas.

INCREASE IN STATE DEATH RATE FROM CANCER AND HEART DISEASE

According to reports submitted to the state department of health, the two leading causes of death in West Virginia since 1941, diseases of the heart and cancer, respectively, showed an increase in 1947 over the previous years.

In 1941, the death rate from diseases of the heart was 192.5 per 100,000 population, and in 1947, 231.1. The death rate from cancer jumped from 83.4 in 1941 to 103.3 in 1947.

Although deaths from diseases of the heart in 1947 are high in West Virginia, they compare favorably with conditions in the United States as a whole, the national figures being 306.6. The same is true of cancer, the national rate being 129.6. Part of the increase in the cancer death rate is attributed by health authorities to the case finding program of the division of cancer control of the state health department, which was established in 1944.

As the average age in West Virginia is comparatively young, health officers look for a continued increase in cancer cases with an attendant increase in the death rate from this cause.

It is also thought that the average age of West Virginians accounts for the fact that the national death rate from diseases of the heart is higher than in this state.

According to Dr. N. H. Dyer, state health commissioner, the 52,510 births reported in 1947 constitute the highest total in the history of the state. The rate of 28.4 per 1,000 population compares with 26.2 in 1946, the previous high mark recorded.

The rate of 9.1 deaths per 100,000 population from all causes in 1947 compares with 8.7 in 1946.

HOW MANY DOCTORS IN WEST VIRGINIA?

The state health department is undertaking a survey of doctors practicing in West Virginia at the present time. This survey is being made as the result of an order entered at the last meeting of the public health council.

West Virginia has no law requiring the annual or biennial registration of physicians. The West Virginia State Medical Association maintains a current roster of members (active and inactive), but there is no current list of doctors who are not members of that organization.

Heretofore, the only active list of all doctors has been carried in the American Medical Directory. No edition of the directory has been published since 1942, so that list is not complete at the present time.

Dr. N. H. Dyer, state health commissioner, has mailed to the last known address of every doctor in this state a questionnaire. asking for specific and statistical information. This questionnaire should be filled out and returned without delay. Additional copies may be obtained from the state health department, local medical societies, and the West Virginia State Medical Association.

STATE'S 62 RED CROSS CHAPTERS GEARED FOR PEACETIME SERVICES

The 1947 annual report of West Virginia's 62 Red Cross chapters has been released by the American Red Cross. In a four-page summary of activities in the state chapters, it is pointed out that emphasis during the past year was primarily on services of a peacetime nature. In terms of individuals served, post-war peacetime activities have steadily increased.

Veterans, and their families, dependents and survivors, have comprised the largest single group receiving Red Cross Home Service aid. According to the report, 20,964 of the 37,230 cases listed as handled by the Red Cross Home Service involved assistance to ex-service men.

Aid included such matters as help in obtaining government benefits, financial assistance, guidance and counsel, and referral to agencies in the community offering specialized services for particular needs.

Financial assistance in the amount of $125,683.72 was rendered by the Red Cross in this state to a total of 5,129 persons, including service and ex-service men. Certificates in the fields of first aid, water safety, accident prevention, life saving and swimming were awarded to 7,211 citizens of West Virginia during the past year. Over eleven hundred certificates for the completion of home nursing courses were awarded during that same period.

The report, in stressing the contribution of volunteer workers, cited the number of hours served by them in various branches of Volunteer Services. The Gray Ladies alone contributed 10,130 hours in two Veterans Administration hospitals, and 1674 hours of relief to hard-pressed nurses in civilian, military, and naval hospitals, were contributed by 28 Nurse's Aides.

The West Virginia chapters responded three times during catastrophies in 1947. Assistance was rendered to 271 West Virginians, as the result of fire, explosion and plane crashes.

The total sum of $627,110 was subscribed to the 1947 Red Cross Fund. More than a quarter of a million students in 2,439 elementary and secondary schools throughout the state are participating in Junior Red Cross activities. College units are active in three institutions of higher learning.

AM. BD. OB. AND GYN. EXAMINATIONS

The general oral and pathology examinations (Part II) of the American Board of Obstetrics and Gynecology, Inc., will be held May 16-22, at the Shoreham hotel in Washington. Each candidate will be furnished notice concerning the exact time of the examination, and candidates for reexamination in Part II must file written application with the secretary not later than April 1. Hotel reservations may be made directly with the management at the Shoreham hotel.

According to the secretary, Dr. Paul Titus, of Pittsburgh, applications will be received until November 1 for the 1949 examinations. Full information may be obtained by writing Doctor Titus at 1015 Highland Building, Pittsburgh 6, Pennsylvania.

W. VA. SOCIAL HYGIENE ASSOCIATION

Organization of the West Virginia Social Hygiene Association was completed at a meeting held in Charleston late in January.

The following officers were elected for the ensuing year: President, James B. Deck, Beckley; vice presidents, Verle S. Carpenter, Huntington, and Robert K. Powell, Fairmont; secretary-treasurer, Dr. Andrew P. Sackett, Charleston; trustees, Mesdames Thelma Shaw, Fairmont, and Louise Blanchard and Eleanor Brown, Huntington, Misses Emily Jo Sullivan, Fairmont, and Minna Belle Killman, Beckley, and Mr. Larkin Philpott, Beckley. The elective officers will serve as members of the board of trustees ex officio.

Additional members of the board will be elected at a later date to represent the State Medical Association, the State Department of Health, and the State Board of Education.

RELOCATIONS

Dr. Leonidas Williams, of Meadow Bridge, has moved to East Rainelle, where he will continue in general practice.

* * * *

Dr. B. M. Hyman, of Montgomery, has moved to Beaumont, Texas, where he will continue the practice of his specialty of EENT.

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Dr. S. Sprigg Jacob, formerly of Wellsburg, has recently become associated in practice with Dr. John F. Sander, with practice limited to pediatrics, at 401 West Grand Avenue, East Lansing, Michigan.

* * * *

Dr. Milton J. Lilly, Jr., of Charleston, is in Chicago, where he has accepted a year's residency in ophthalmology at the Illinois Eye and Ear Infirmary.

* * * *

Dr. Walter H. Dearing, of Amigo, has moved to Huntington, where he will continue in general practice. He has offices at 217 West Ninth Avenue, in that city.

* * * *

Dr. Lewis E. Nolan, of Montgomery, who has been serving as Chief of the Laboratory Service at the Veterans Administration Hospital at Columbia, South Carolina, has located in Fairmont, where he will continue the practice of his specialty of pathology.

* * * *

Dr. Phillip W. Ogden, formerly on the staff at the Mattie Williams Hospital at Richlands, Virginia, has moved to Oak Hill, where he is a staff member at the Oak Hill Hospital.

DR. T. W. NALE ASSUMES NEW DUTIES

Dr. Thomas W. Nale, former medical director at the South Charleston plant of Carbide and Carbon Chemicals Corporation, has been named manager of the industrial toxicology department of the Union Carbide Corporation, in New York City.

Doctor Nale was transferred by his company to New York City in 1946, and has been residing at Larchmont.

ADVANCED TRAINING IN ARMY HOSPITALS

The U. S. Army Medical Department announces the availability of opportunities for advanced training and experience in the various special fields of medicine and surgery in overseas Army hospitals. These hospitals are registered with the American Medical Association, and this training may be acceptable by the specialty board as part of the period usually required to be spent in limited practice and experience prior to admission for examination. Interested members of the medical profession who have completed the formal training requirements for certification in one of the special fields are eligible to apply for these positions.

The applicant may avail himself of this training for periods of one, two or three years. Those applicants who are selected, and who hold reserve commissions in the Medical Corps, will usually be recalled to active duty in the highest grade attained prior to release from previous active service. Those who do not hold such reserve commissions will be tendered a reserve commission in the Medical Corps in keeping with their age, years of professional experience and prior service in any branch of the Armed Forces. Prior military service is not required.

Individuals who are members of the U. S. Naval Reserve must transfer to the Army Reserve before being called to active duty. Families of married applicants will be allowed to accompany them to the place of duty. Suitable quarters are available. Families of individuals who do not declare their desire to serve for periods to exceed one year cannot be transported at government expense.

Eligible physicians are invited to communicate with the Surgeon General, U. S. Army, Washington 25, D. C.

DR. BESS VISITS LOCAL SOCIETIES

When Dr. Thomas Bess, of Keyser, assumed the office of president of the West Virginia State Medical Association, he announced that he expected to visit each of the 29 component societies during the winter and early spring. Following this plan during January and February, he visited the following societies: Harrison, Logan, Raleigh, Greenbrier, Taylor, Marion, Monongalia, Parkersburg Academy, Wetzel, McDowell, Cabell, Mason, Boone, Mercer, Wyoming, and Eastern Panhandle.

Doctor Bess' schedule for March and April is as follows:

Date	Society	Place
March 2	Central W. Va.	Sutton
March 4	Preston	Hopemont
March 9	Kanawha	Charleston
March 11	Barbour	Parsons
March 16	Marshall	Glendale
March 17	Mingo	Williamson
April 1	Hancock	Weirton

Dates for the President's appearance before the Ohio County, Potomac Valley, and Summers County societies have not yet been definitely fixed.

SOUTHEASTERN SURGICAL CONGRESS TO HEAR WEST VIRGINIA DOCTORS

Two West Virginia doctors will appear on the program at the Sixteenth Annual Assembly of the Southeastern Surgical Congress, which will be held April 5-8, 1948, at the Hollywood Beach Hotel, Hollywood, Florida.

Dr. Joseph P. Webb, of Huntington, will speak on the subject of "Needle Biopsy of the Liver in Diagnosis of 'Surgical' Jaundice", and Dr. R. S. Widmeyer, of Parkersburg, will present a paper on "Child and Infant Surgery." Besides these two doctors, the following surgeons will appear on the program:

Harry Bacon, Philadelphia—"Surgical Management of Cancer of the Lower Bowel Without Colostomy."

Frederick Boyce, New Orleans—"Human Bites."

Lester A. Brown, Atlanta—"Is There Anything Really New in Otolaryngology?"

George Curtis, Cleveland—"The Surgery of the Spleen."

Gilbert Fisher, Birmingham—"The Conservative and Surgical Management of Esophageal Obstruction."

L. J. Gariepy, Detroit—"Carcinoma of the Gallbladder."

Arnold Griswold, Louisville—"The Treatment of Peptic Ulcer by Resection of the Vagus Nerves."

William G. Hamm, Atlanta—"Plastic Repair of Injuries of the Male Genitalia."

Claude J. Hunt, Kansas City—"Surgical Treatment of Malignant Lesions of the Colon Complicated by Inflammatory Reaction, Fixation or Obstruction."

Rudolph Jaeger, Philadelphia—"Intracranial Aneurysms; Surgical Treatment."

Frank Johns, Richmond—"Cancer of the Colon."

J. Harvey Johnston, Jr., Jackson, Miss.—"Acute Cholycystitis."

Willoughby Kittredge, New Orleans—"Subcapsular Nephrectomy: Its Indications and Advantages."

Herman Kretschmer, Chicago—"Some Problems Associated with Surgery of Kidney Stones."

Ira Lockwood, Kansas City—"Non Obstructive Lesions of the Colon."

Robert Major, Augusta—"Trans thoracic Approach to Lesions of the Esophagus and Upper Abdomen."

Samuel F. Marshal, Boston—"Tumors of the Neck."

George H. Martin, Vicksburg, Miss.—"Congenital Anomalies of the Gastro-Intestinal Tract in Infants and Children."

Charles Mayo, Rochester—"Surgical Procedures for Carcinoma of the Lower Colon and Rectum."

Julian M. Moore, Asheville, N. C.—"The Management of Hemothorax."

Carl Moyer, Dallas—"Alterations in Renal Function of Man Incident to Operative Trauma and Anesthesia."

Martin Nordland, Minneapolis—"Fundamental Principles in Thyroidectomy."

E. G. Ramsdell, White Plains, N. Y.—"Carcinoma of the Breast, A Comparative Statistical Study."

Fred Rankin, Lexington, Ky.—"The Surgical Treatment of Polyposis."

Henry K. Ransom, Ann Arbor, Michigan—"Experiences with Total Gastrectomy."

William L. Sibley, Roanoke—"Lead Poisoning in Infancy, a Case Upon Whom Two Unnecessary Operations Were Performed."

Dargan Smith, Owensboro, Ky.—"Glycerin Osmotic Drainage in Peritonitis."

Walter Stuck, San Antonio, Texas—"Complications of Fractures of the Shaft of the Femur."

H. G. Smithy, Charleston, S. C.—"An Approach to the Surgical Treatment of Chronic Valvular Disease of the Heart."

Charles C. Trabue, Nashville—"Plastic Procedures for the General Surgeon.

David A. Wilson, Greenville, S. C.—"The Treatment of Bilateral Apical Pulmonary Tuberculosis."

John M. Wilson, Mobile, Ala.—"Management of Intestinal Obstruction."

The following surgeons have also accepted invitations to present papers, and the titles will be announced at a later date:

Herbert Acuff, Knoxville; A. F. Burnside, Columbia, S. C.; M. Y. Dabney, Birmingham; J. W. Devine, Jr., Lynchburg, Va.; L. W. Dowlen, Miami, Florida; J. G. Lyerly, Jacksonville, Florida; L. M. Orr, Orlando, Florida; James F. Robertson, Wilmington, N. C.; R. L. Sanders, Memphis, Tenn.; and, Ambrose Storck, New Orleans.

DR. PAUL R. HAWLEY HEADS BLUE CROSS

Dr. Paul R. Hawley, who resigned January 1 as chief medical director of the Veterans Administration, has accepted appointment as chief executive officer of the national organization of Blue Cross hospital service plans and Blue Shield medical-surgical plans. He will assume his new duties April 1, and will have headquarters in Chicago.

Doctor Hawley will direct the activities of the Blue Cross Commission of the American Hospital Association Coordinating Agency for the 91 approved non-profit hospital service plans in the United States and Canada, as well as the 48 non-profit medical-surgical prepayment plans.

Non-profit hospital and medical-surgical service plans in Charleston, Huntington, Wheeling, and Parkersburg are affiliated with the newly merged Blue Cross and Blue Shield organizations.

AMERICAN ACADEMY OF PEDIATRICS

The annual meeting of the American Academy of Pediatrics will be held at the Statler Hotel, Buffalo, New York, April 29-May 2, 1948.

According to Dr. Russell C. Bond, of Wheeling, West Virginia, Chairman of the Academy of Pediatrics, the meeting will be open to all members of the West Virginia State Medical Association who are interested in the subject.

The total registration fee will be $10.00, and registrants will be given a ticket to the annual banquet without additional charge.

Advance registrations will now be received by Dr. C. G. Grullee, Secretary-Treasurer, American Academy of Pediatrics, 636 Church Street, Evanston, Illinois. Check for registration fee should be enclosed if registration is requested in advance of the meeting.

PROTECTION FUND FOR SCHOOL ATHLETES

The West Virginia High School Athletic Association maintains and operates a "protection fund" for high school athletes, and the report for 1947, just issued by W. R. Fugitt, Executive Secretary, of Beckley, shows that 3,097 athletes from 93 schools were protected during the year. This comprises 55 per cent of the schools sponsoring football teams, and an established 40 per cent of the boys playing football.

In basketball, coverage was provided for 875 boys in 37 schools.

A breakdown of the statistical report shows that during the year 130 injuries were sustained within the "schedule of benefits," with claims amounting to $3,-387.10.

A meeting will probably be held at an early date by representatives of the West Virginia High School Athletic Association and the State Medical Association for the purpose of agreeing upon an equitable schedule of fees for services comparable to fees paid under other plans in operation in this state.

RESOLUTIONS OF RESPECT FOR DR. HUNTER

At a meeting of the Resolutions Committee of Region 2, American Cancer Society, held at Baltimore, January 10, 1948, resolutions of respect to the memory of the late Dr. J. Ross Hunter, of Charleston, were unanimously adopted. The Resolutions Committee is composed of Mr. George B. Larson, Dr. Russell B. Bailey, and Elizabeth Whitlock. The resolutions follow:

"WHEREAS, Dr. J. Ross Hunter, Regional Medical Director of the American Cancer Society from Region 2, has been called to his eternal reward; and,

"WHEREAS, Dr. Hunter gave so unselfishly of himself to the control of cancer and to the American Cancer Society:

"THEREFORE, BE IT RESOLVED: That Region 2, in meeting assembled, pay tribute to the memory of Dr. Hunter through an expression of appreciation for the service he gave and of the loss to the American Cancer Society; and,

"That a copy of these resolutions be spread upon the minutes of this meeting, and copies sent to the family of Dr. Hunter, the National Headquarters, and the West Virginia Medical Journal."

POLIO SCIENTIFIC EXHIBITS AVAILABLE

Scientific exhibits, graphically depicting current medical and scientific poliomyelitis data, are available for annual meetings of state and regional medical associations. Prepared by the National Foundation for Infantile Paralysis as part of its professional education program, the exhibits cover diagnostic criteria, techniques of muscle testing, histopathology, syndromes of bulbar poliomyelitis, as well as results of scientific research on virus characteristics, role of flies and sewage, and a working hypothesis of transmission during epidemics.

Further information concerning exhibits may be had by writing to the Director of Scientific Information, National Foundation for Infantile Paralysis, 120 Broadway, New York 5, N. Y.

NATIONAL CONFERENCE ON MEDICAL SERVICE

At the meeting of the National Conference on Medical Service, held in Chicago, February 8, the following officers were elected for the ensuing year:

President, E. F. Sladek, Traverse City, Michigan; secretary, John S. Bouslog, Denver, Colorado; members of executive committee, Creighton Barker, Hartford, Connecticut; Frank Elias, Duluth, Minnesota; J. D. McCarthy, Omaha, Nebraska; Dwight H. Murray, Napa, California; Cleon A. Nape, Indianapolis; C. L. Palmer, Pittsburgh; Britton E. Pickett, Sr., Carrizo Springs, Texas; Charles Pfifer, Chicago; William B. Stovall, Madison, Wisconsin; and Walter E. Vest, Huntington.

Besides Doctor Vest, the following West Virginia doctors attended the conference:

Thomas Bess, Keyser; N. H. Dyer, Charleston; George W. Easley, Williamson; and Edward J. Van Liere, Morgantown.

ANNUAL AUDIT

The annual audit of receipts and disbursements of the West Virginia State Medical Association for the calendar year 1947 has been completed by Norman S. Fitzhugh, Certified Public Accountant, and submitted to the treasurer, Dr. T. M. Barber, of Charleston. The complete audit follows:

Dr. T. M. Barber, Treasurer
West Virginia State Medical Association
Charleston, West Virginia

I have audited the receipts and disbursements of the West Virginia State Medical Association for the calendar year ended December 31, 1947, and am submitting herewith statements covering the various funds for the year under review.

All receipts of record and all disbursements were verified and the cash balance was reconciled with statements of the depository bank. Sufficient tests were made of available information to satisfy me that all receipts had been properly recorded. Cancelled checks evidencing all disbursements were on hand except for three checks dated in November and December 1947, totaling $54.40 which had not been cleared by the bank at December 31, 1947.

I therefore certify that, in my opinion, all receipts in the year under review have been properly accounted for and all receipts and disbursements are correctly stated on the books and in the statements attached hereto.

I further certify that the balance in bank at the close of business on December 31, 1947 amounted to $12,381.35.

A statement of cash follows:

Balance December 31, 1946	$15,787.89
Receipts—1947	31,453.54
Total	$47,241.43
Disbursements—1947	34,860.08
Balance December 31, 1947	$12,381.35

The cash balance at December 31, 1947 is attributable to the various funds as follows:

General Fund	$ 1,055.71
Medical Journal Fund	12,566.46
Total	$13,622.17
Less: Convention Fund—Deficit	1,240.82
Total All Funds	$12,381.35

The United States Treasury Registered 2% Bonds having a face value of $22,000.00 were inspected by me in your safty deposit box on January 2, 1948.

A comparative statement of assets at December 31, 1946 and December 31, 1947 is as follows:

	Dec. 31, 1946	Dec. 31, 1947	Increase (Decrease)
Cash in Bank	$15,787.89	$12,381.35	($3,406.54)
U. S. Treasury 2% Bonds (Face Value $22,000.00)—at cost	22,101.53	22,101.53	
Totals	$37,889.42	$34,482.88	($3,406.54)

NORMAN S. FITZHUGH, JR.,
Certified Public Accountant.

Charleston, W. Va.
January 24, 1948.

COMBINED STATEMENT OF RECEIPTS AND DISBURSEMENTS

Calendar Year 1947

BALANCE JANUARY 1, 1947		$15,787.89
RECEIPTS:		
Dues (Net)	$13,767.50	
Interest on U. S. Bonds	440.00	
Advertising	13,900.29	
Emblems Sold	270.25	
Subscriptions to Journal	45.50	
Commercial Exhibits	3,030.00	
Total Receipts		31,453.54
		$47,241.43
DISBURSEMENTS:		
General Fund	$17,467.95	
Medical Journal Fund	13,121.31	
Convention Fund	4,270.82	
Total Disbursements		34,860.08
BALANCE—DECEMBER 31, 1947		$12,381.35

Cash in Bank December 31, 1947 — $12,381.35

GENERAL FUND

Statement of Receipts and Disbursements Calendar Year 1947

BALANCE JANUARY 1, 1947			$ 4,316.16
RECEIPTS:			
Dues	$13,857.50		
Less: Refunds	90.00	$13,767.50	
Interest on U. S. Bonds		440.00	
Total Receipts			14,207.50
			$18,523.66
DISBURSEMENTS:			
Salary—Executive Secretary (Less Payroll Taxes)		$ 6,214.65	
Office Salaries (Less Payroll Taxes)		3,485.70	
Office Supplies and Expense		1,106.03	
Office Rent		1,400.00	
Telephone and Telegraph		364.63	
Postage		445.25	
Travel		1,638.14	
Miscellaneous Expense		1,084.15	
Social Security Tax		151.20	
Withholding Tax		1,578.20	
Total Disbursements			17,467.95
BALANCE DECEMBER 31, 1947			$ 1,055.71

MEDICAL JOURNAL FUND

Statement of Receipts and Disbursements
Calendar Year 1947

BALANCE JANUARY 1, 1947		$11,471.73
RECEIPTS:		
Advertising	$13,900.29	
Emblems Sold	270.25	
Subscriptions to Journal	45.50	
Total Receipts		14,216.04
		$25,687.77
DISBURSEMENTS:		
Printing	$ 9,891.88	
Engraving	324.36	
Postage	254.25	
Emblems and Frames Purchased	270.16	
Miscellaneous Expense	605.66	
Salaries	1,775.00	
Total Disbursements		13,121.31
BALANCE DECEMBER 31, 1947		$12,566.46

CONVENTION FUND

Statement of Receipts and Disbursements
Calendar Year 1947

BALANCE JANUARY 1, 1947		$ —0—
RECEIPTS:		
Commercial Exhibits		3,030.00
		$ 3,030.00
DISBURSEMENTS:		
Supplies and Labor	$ 1,702.03	
Travel	525.05	
Entertainment	275.15	
Reporting	438.00	
Rent of WCHS Auditorium—Exhibit Space	850.00	
Rent of Shrine Mosque—Meetings	225.00	
Miscellaneous Convention Expenses	255.59	
Total Disbursements		4,270.82
BALANCE (DEFICIT)—DECEMBER 31, 1947		($1,240.82)

WEATHER FORCES POSTPONEMENT OF MEETINGS

Snow, ice, high water, and bad roads made traveling dangerous and forced the cancellation or postponement of several meetings of special groups and committees of the West Virginia State Medical Association during the past month. At one meeting, where 30 doctors were expected, it was possible for but ten to be present.

Wherever possible, the meetings postponed will be held sometime during the month of March.

"NO HELP WANTED"

The film, "No Help Wanted," produced by the National Association of Mutual Casualty Companies, Chicago, is now available upon a loan basis for specific showing to all component societies of the West Virginia State Medical Association. There is no rental charge, and the only cost to exhibit the film is the return shipping charge.

"No Help Wanted" is an unusual one-reel film of compelling interest that answers, with facts, the question, "can disabled veterans get jobs." Its message is of vital interest to everybody. The film shows clearly how many jobs can be performed by the veteran who has been disabled in the service of his country.

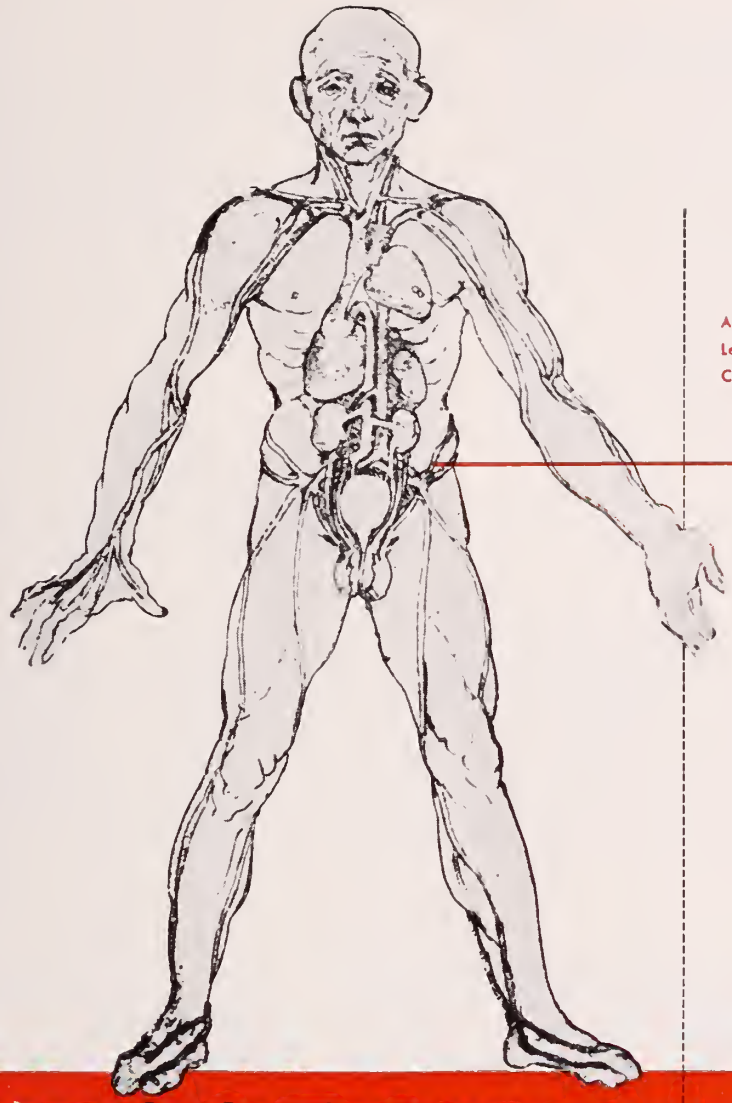
The film is intended to appeal not only to employers, but to the veterans themselves. It shows men being trained in offices and shops, as well as the return of veterans to an active civilian life.

The film is 16 mm., black and white, sound, and the showing time is eighteen minutes. Interested societies should write the American Mutual Alliance, 919 Michigan Avenue, Chicago, Illinois.

CONVENTION COMMITTEES

Dr. Edwin J. Humphrey, of Huntington, has been named chairman of the local committee on entertainment for the 81st annual meeting of the West Virginia State Medical Association, May 10-12, 1948, in that city. The other members of the committee are, Drs. J. S. Klumpp, Ray M. Bobbitt, W. Byrd Hunter, I. Ewen Taylor, Dorsey Ketchum, R. W. Coplin, and Oscar B. Biern.

The following committee on housing has been appointed to aid members in obtaining room reservations for the convention: Dr. James R. Brown, chairman, and Drs. Virgil Chambers, Leo Christian, Stafford Clay, Clarence Boso, Robert Barrett, Gilbert Ratcliff, and R. J. Stevens.



Anatomic drawing by
Leonardo da Vinci—
Courtesy, The Bettmann Archive.

Leonardo da Vinci (1452-1519)

was well ahead of his time, for physicians of his day knew little of the function of the heart or the treatment of its diseases, although da Vinci's knowledge of such anatomy was extensive.

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OF MEDICINE

County Society News

CABELL

Dr. Thomas Bess, president of the West Virginia State Medical Association, and Dr. N. A. Baker, of Charleston, past president of the West Virginia Dental Society and dentist member of the public health council, were speakers at a joint meeting of the Cabell County Medical Society and Cabell County Dental Society, held February 12, at the hotel Prichard, in Huntington.

T. L. GROVE, M. D.,
Secretary.

* * * *

FAYETTE

Dr. Peter Ladewig, pathologist at Laird Memorial hospital, Montgomery, was the guest speaker at the regular luncheon meeting of the Fayette County Medical Society, held February 2, at the Hotel Hill, in Oak Hill.

The speaker discussed the Papanicolaou smear in the diagnosis of malignancy. He outlined the historical development of this method of diagnosis and presented a series of cases in which the method was utilized.

Doctor Ladewig pointed out that use of this method will aid in a diagnosis before clinical evidence of malignancy is apparent. He suggested that the method, which is not complicated, be used more frequently by general practitioners.

Dr. Philip W. Oden was elected a member of the society at the business meeting preceding the scientific program.

C. B. HUGHES, JR.,
Secretary.

* * * *

KANAWHA

Dr. I. A. Bigger, Professor of Surgery at the Medical College of Virginia, in Richmond, was the guest speaker at the regular monthly meeting of the Kanawha Medical

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RICHMOND, VIRGINIA
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Society, held February 10, at the Daniel Boone hotel, in Charleston.

Resolutions of respect to the memory of the late Dr. J. Ross Hunter were offered by Dr. E. A. Davis and unanimously adopted.

The following Charleston doctors were elected to membership: A. B. Curry Ellison, John A. B. Holt, J. Keith Pickens, and Reuben F. Wohlford.

JOHN W. HASH, M. D.,
Secretary.

* * * *

MARION

Dr. Thomas Bess, president of the West Virginia State Medical Association, was the guest speaker at a joint dinner meeting of the Marion County Medical Society and Auxiliary, held January 27, at the Fairmont hotel, in Fairmont. Dr. Bess, paying his first official visit to the society since assuming the office of president, discussed pending legislation, rural health, public health, and the great need for a four-year school of medicine at West Virginia University. His paper was discussed by Dr. John P. Helmick and Dr. J. B. Clinton.

At the business meeting held following the scientific program, Dr. Lewis E. Nolan, of Montgomery, was elected a member of the Society by transfer from the Fayette County Medical Society.

GEORGE T. EVANS, M. D.,
Secretary.

* * * *

POTOMAC VALLEY

Dr. Mark Kroll, of Cumberland, Maryland, was the guest speaker at the regular monthly meeting of the Potomac Valley Medical Society, held February 11, at the Old Homestead hotel, in Burlington. His subject was, "Clinical Syphilis."

M. H. MAXWELL, M. D.,
Secretary.

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Obituaries

GORDON LIVINGSTON TODD, M. D.

Dr. Gordon Livingston Todd, 63, owner of and chief surgeon at the Memorial hospital in Princeton, died unexpectedly February 3, following a heart attack suffered in his apartment at the hospital. He had been busy in the operating room until five o'clock in the afternoon. Death came at 10:45 o'clock at night.

Doctor Todd was born at Mount Solon, Virginia. He received his M. D. degree from the University of Virginia in 1910, and interned at the University Hospital in Charlottesville, 1910-12. He located at Princeton in 1913, where he practiced his specialty of surgery continuously until his death.

He always took an active part in the civic life of his city, and was prominently identified with all movements concerned with the betterment of his community. He was a member of the Rotary club, the Elks lodge, Bluefield Country club, and University Club at Bluefield.

Besides his widow, he is survived by a son, Dr. G. L. Todd, Jr., a member of the staff at Memorial hospital, and associate of his father in the operation of the hospital. He is also survived by his father, R. A. Todd, of Staunton, Virginia.

DIABETES ABSTRACTS*

SUMMER CAMPS FOR DIABETIC CHILDREN**

The authors describe the summer camp which is sponsored by the George M. Baker Clinic of the New England Deaconess Hospital and financed in part by the Association of Universalist Women, in part by fees from the children, and in part by the Diabetic Fund. The object of the camp is three-fold. The first of these aims is the readjustment of treatment which includes regulation of diabetes, instruction in the care of the disease, and the psychological adjustment to diabetes in the presence of other diabetics. The second objective is provision of the recreational advantages of a well-organized summer camp. This program includes swimming, handicraft, naturecraft, folk dancing, baseball, archery, and other activities. The third objective is the provision of a "breathing spell" for the parents of the children, who are given a well earned rest from a grave responsibility.

The staff of the camp consists of two departments: The recreation department includes a camp director,

*The opinions expressed in these abstracts do not necessarily reflect the views of the members of the Diabetes Committee of the West Virginia State Medical Association.

**Priscilla White, M. D. and Elanor W. Waskow, M. D., Medical Clinics of North America, Vol. 31, No. 2, March, 1947.

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financial secretary, an adequate corps of picked counselors, a competent cook, and kitchen help. The medical staff consists of two or more physicians who make weekly visits and such emergency calls as are necessary, two nurses, and one laboratory technician. In addition to the usual equipment to be found in any summer camp, the camp for diabetic children must provide a laboratory and include a plan for providing weighed diets. The number of calories allowed each child are based upon the formula which has been employed for a number of years by Dr. White, namely, 1,000 calories allowed at the age of 1 year and the addition of 100 calories for each year of age until the completion of growth and development so that a child of 10, for example, would receive 1900 calories. Carbohydrate constitutes 40 per cent, protein 20 per cent, and fat 40 per cent of the calories in the diet. The diet for boys is increased until the age of 19 while the maximum diet for girls is obtained at the age of 14.

The usual vacation period for each child is two weeks. Boys' and girls' camps are run as separate units.

The insulin dosage apparently was regulated by the amount of sugar excreted in the 24-hour specimens and in single specimens obtained at six, eleven, four, and nine o'clock. Apparently, this change in insulin is made by nurses according to the urinary findings. (This plan seems to depart from standard procedure and is not considered good practice by the reviewer.)

In general, the insulin requirements during the camp period were either slightly decreased or maintained at the same level. Children in the age groups above 12 required an increase of insulin corresponding to the development of the secondary sex characteristics. There was some gain in weight for almost all age groups during the two weeks' stay. This is in contrast with the usual experience in non-diabetic summer camps where most children lose slightly during their stay. Diabetic control in general was maintained at a very satisfactory level. The girls on the average were under better diabetic control on arrival in camp and remained under better control than the boys.

Summer camps for diabetic children have been in the past, and continue to be a very valuable adjunct in the treatment of the disease. At the present such camps are of some value in combating the existing shortage of hospital facilities.

The authors of this article are well-known in the field of diabetes and pediatrics. It would seem to the reviewer that a bit more rigid medical control might be instituted for the sake of the safety and well-being of the charges in the care of the camp. It is probable, however, that this criticism is met partially by the very specially trained nurses in attendance.—W. M. S.

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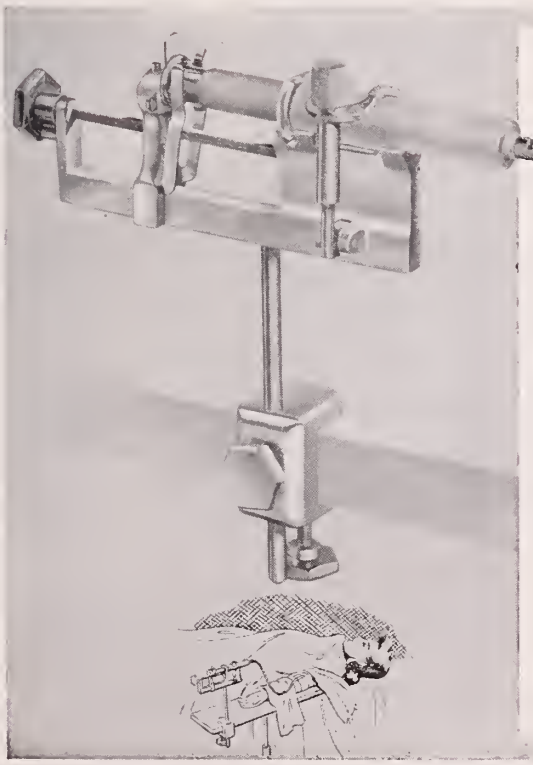

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Woman's Auxiliary

CABELL

The regular monthly luncheon meeting of the Woman's Auxiliary to the Cabell County Medical Society was held February 10, in the Crystal Room, at the Hotel Frederick, in Huntington.

The following new members of the Auxiliary were presented at the meeting: Mesdames W. E. Irons, Robert Dennison, Wilson P. Smith, Harlan Stiles, Albert Esposito, E. B. Gerlach, R. W. Coplin, George Flesher, Sidney Werthammer, Tom Baer, Charles Polan, and M .J. Thomas.

The president, Mrs. Raymond Curry, announced that there are now 71 active members of the Cabell County Auxiliary.

Mrs. W. B. MacCracken discussed plans for a Valentine's Day party February 14, for the children at St. Mary's hospital. Besides Mrs. MacCracken, the committee is composed of Mrs. Russell Cook, Mrs. Jack German, and Mrs. Norris F. Hines.

Plans for Doctor's Day, to be observed March 11, were discussed by Mrs. Gilbert Ratcliff. On that date, the Auxiliary will entertain the members of the Cabell County Medical Society following the regular meeting at the Hotel Prichard. Mesdames W. E. Neal, J. R. Bloss, I. W. Taylor, J. C. Ford, Tom Folson, and Lawrence Gang are members of Mrs. Ratcliff's committee.

Following the business meeting, Mrs. Joseph Krimsky, of Huntington, one of the Tri-State's most accomplished musicians, presented an excellent program of piano selections. Mrs. W. B. Swann was in charge of the entertainment.

MRS. GATES J. WAYBURN,
Editorial Chairman.

* * * *

HARRISON

Dr. Clair E. Turner, assistant to the president of the National Foundation for Infantile Paralysis, was the guest speaker at a joint meeting of the Harrison County Medical Society and Auxiliary, held February 6, at the Stonewall Jackson hotel, in Clarksburg. Mrs. John F. McCuskey was general chairman of the meeting, and the speaker was presented by Dr. W. H. Allman, president of the Society.

Doctor Turner's subject was, "Medicine and the People Fight Disease." He stated that there are now 2,735 chapters of the National Foundation in the United States, with aid having been extended to 88,000 patients.

"The Foundation finances the treatment of the patients," said Doctor Turner, "and 717 hospitals throughout the country take care of the polio cases. The Foundation is at the present time sponsoring 540 research projects in 39 states."

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Surgical Anatomy & Clinical Surgery, Two Weeks, Starting April 12, May 10.
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Surgical Pathology Every Two Weeks.

FRACTURES & TRAUMATIC SURGERY—Intensive Course, Two Weeks, Starting June 7.

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GYNECOLOGY—Intensive Course, Two Weeks, Starting April 26, June 7.

OBSTETRICS—Intensive Course, Two Weeks, Starting April 12, June 21.

MEDICINE—Intensive Course, Two Weeks, Starting April 26.
Personal Course in Gastroscopy, Two weeks, Starting March 29, April 19.
Electrocardiography & Heart Disease, Four Weeks, Starting May 3.

DERMATOLOGY—Formal Course, Two Weeks, Starting April 26.
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Preceding Dr. Turner's address, a dinner meeting of the auxiliary was held at the Waldo hotel. Hostesses were Mesdames W. W. Spelsberg, John McCuskey, and E. B. Wright. Mrs. A. J. Weaver was the guest soloist. The dinner was attended by 32 members of the Auxiliary and guests.

MRS. JOHN T. GOCKE,
Secretary.

* * * *

OHIO

The regular monthly luncheon meeting of the Woman's Auxiliary to the Ohio County Medical Society was held at the Windsor Hotel, Wheeling, January 20, with twenty members present. The chairman of the Clothing Chest reported that 37 needy school children had been supplied with clothing from the Chest, and that clothing had been purchased and distributed to an additional 20 children.

MRS. CARL S. BICKEL,
Corresponding Secretary.

* * * *

RALEIGH

The regular monthly luncheon meeting of the Woman's Auxiliary to the Raleigh County Medical Society was held January 19, at the Beckley Hotel, in Beckley.

Three new members were introduced at the luncheon: Mrs. J. W. Whitlock and Mrs. J. W. Newman, of Affiinity, and Mrs. C. E. Davis, of Beckley

The Auxiliary voted unanimously to make another contribution to the Jane Todd Memorial Fund.

Following the short business session, five tables of bridge were in play during the afternoon.

Mrs. W. E. Covey, the president, presided at the meeting, which was attended by 26 members and one guest.

MRS. FRED RICHMOND,
Secretary.

LILLY BOARD CHAIRMAN PASSES

Josiah Kirby Lilly, 86, chairman of the board of directors of Eli Lilly & Company, died at his home in Indianapolis, February 8, 1948. His father, Colonel Eli Lilly, founded the company May 10, 1876, and Josiah Kirby, as "a boy with a wicker basket," delivered the first pound of a Lilly product to a near-by wholesale druggist. He was then 14 years of age.

Josiah Lilly graduated from the Philadelphia College of Pharmacy in 1882. He was elected president of the company in 1898, and became chairman of the board in 1932. In recognition of his services in civic, scientific, educational and cultural organizations, honorary degrees had been conferred upon him by eight colleges.

BRITISH DOCTORS VOTE "NO"

The doctors in England who are members of the British Medical Association have overwhelmingly rejected the Government's program for socialized medicine. According to the Associated Press, a poll of the members conducted by the Association showed 25,340 doctors oposed to the program as compared with 4,084

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in favor of it. The bill which was passed by Parliament in 1947 becomes effective in July, 1948.

The members of the British Medical Association also voted 24,066 to abide by the majority decision. Only 4,494 declined to take this pledge.

A BLOW TO "SPUD FATIGUE"

The advent of potato rationing was followed by a benevolent Ministry's announcement that potatoes should be cooked in their skins. I can hear my late Flight-Sergeant Admin. saying that he couldn't agree less. I imagine myself back in uniform addressing a lecture-room full of Service cooks. "See," I say, suiting action to words, "see what a wastage of vitamin and solid food falls away into the swill bin. Why should we feed the fat station pig on food destined for our own bodies? Cook them in their skins! We gain callories, save man-power, save vitamins, and increase production. In my hand I hold a ravished tuber. On the floor are peelings, the garlands from her brow. This should be a lesson to all of you! Parade . . . dismiss!" The cooks seem rather dismal as they file out. I turn to the Flight-Sergeant with a raised eyebrow. "Good speech, Sir," he says gloomily, "but gor blimey, Sir, bang goes our flipping spud fatigue."—The Lancet.

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REFERENCES

WANTED—RESIDENT PHYSICIAN at Fort Wayne State School for Mental Defectives, Fort Wayne, Indiana. Medical work mostly General with opportunities in Neuropsychiatry and Pediatrics. Salary $3,000.00 plus maintenance; more depending on special qualifications in Psychiatry. Write Superintendent.

FOR SALE—Office equipment for general practice. Good shape. Bargain price, $500—one-half original cost. Address F-11, Box 1031, Charleston 24, W. Va.

ROTATING INTERNSHIPS and a general residency available July 1 to graduates of approved medical schools. 250 bed general hospital approved by AMA and ACS. Stipend $100 and $200 per month, plus maintenance. Wheeling Hospital, Wheeling, W. Va.

WANTED—Tuberculosis Clinician. Must be eligible for West Virginia license. Salary range, $420.00 to $500.00 monthly, plus travel.—West Virginia State Dept. of Health, Charleston, W. Va.

FOR SALE—Practically new Profexray Fluoroscopic and Radiographic Unit with cassettes, film hangers, developing tank, gloves, etc. Has been used less than two years and is in perfect mechanical condition. Sanborn Insotomatic Cardiette. Less than two years old and in perfect mechanical condition.—Box 1944, Huntington, W. Va.

Book Reviews

A MANUAL OF PHARMACOLOGY—And Its Application to Therapeutics and Toxicology: By Torald Sollman, M. D. 7th Ed., 1948. Pp. 1132. W. B. Saunders Co., Philadelphia. Price $11.50.

The 7th edition of this long honored standard work, completely rewritten, has just been published. "To some there is magic in the number 7," points out Dr. Melvin W. Green, of the American Pharmaceutical Association staff, "but we suspect that 'midnight oil', judgment based upon years of experience in the field, and a knowledge of the needs of the physician, all mixed *secundum artem,* are more responsible for the outstanding character of the 7th edition of this manual, than magic."

To even the most casual observer, this comment is certainly true. The volume is almost an encyclopedia of the latest information. Indeed, it is a "right arm" working volume for physician, pharmacist, teacher and student. The overall picture is in itself tied up with the field of pharmacognosy, or knowledge of drugs. One follows page after page of the latest information on the administration of drugs, the objectives of treatment, new material on insulin, vitamins, choline products, glandular products, prescription writing for the busy physician, etc. In keeping with the modern world of medicine, there are sections on "war gasses," industrial poisoning, and many pages devoted to the new "antibiotic substances" in continual review, as it were, from the "objectives" to an ending with "thallium."

The care with which all the references have been selected will be noted by all the users of the previous editions. Gone are the references to the wishful in medicine. And one cannot but note the monumental bibliography of important papers that have appeared in the literature of the American Medical Association and other sources since 1926. The listings cover 211 pages, a book in itself. The reader desiring up-to-date information on the sulfonamides, folic acid, antihistaminics, and other new drugs will find here all detail that present knowledge justifies. The tendency to use more "heroic" doses is well covered.

Students, pharmacists, and busy physicians will appreciate the more readable style and format used in this edition. A general index, of 27 pages, actually three columns to a page, or 71 in all, make for a very complete and useful work.

Torald Sollman, M. D., the author, is well known to many West Virginians, and is now Professor Emeritus of Pharmacology and Materia Medica at Western Reserve School of Medicine, in Cleveland.—Roy Bird Cook.

BOY OR GIRL?

Is it to be a boy or a girl? Drs. Nieburgs, Kupperman and Greenblatt of the University of Georgia School of Medicine say they can predict with 84.4 per cent accuracy the sex of a baby when it is still in utero. Two tests—one chemical, the other microscopic, determine the ratio of the two kinds of hormones present and the types of tissue lining the uterus.—R. N.

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WHAT TO SAY TO THE MORIBUND

An old friend, who asks me to dinner when I am well and promptly puts me into one of his hospital beds when I fall ill, is shortly to retire, having reached the age limit for a professor of medicine. He has to deliver a valedictory address to his students, and his subject is to be: "What to Say to the Moribund."

Some doctors, he says, have a rule-of-thumb solution for this most delicate of problems: not a word, not a gesture to indicate the approach of death. Such doctors will have nothing to do with the mysteries beyond the veil. The professor himself has as many solutions as he has moribund patients, with this one rule applied to all—to do as he would be done by. One of his patients was an old cancerphobe doctor with a tumour in the lower abdomen. "Is it that, Professor?" he asked. "Yes, I'm afraid it is," came the answer, and the word cancer was never mentioned. It is curious, the professor notes, how seldom hospital patients themselves broach the subject of impending death. Is it that the relation of hospital doctor to hospital patient is seldom tete-a-tete and leisurely?

Looking back, I can remember only one occasion, 40 years ago, when I blurted out a death sentence. It was murder with a bludgeon. The patient was a middle-aged chemist recently admitted to a private sanatorium whose one and only doctor was about to take a holiday. The doctor said to me as I took over: "So-and-so is a 'gonner.' It is your duty to tell him so." There was still plenty of fight in him when I began. When I had finished a minute later he was down and out. A knock-out blow in the ring could hardly have been more instantaneously effective.

Once I was the recipient instead of the donor of a death sentence. The exceedingly able doctor in charge of me felt obliged to tell me my days were numberd. He did so with infinite tact and well-graduated circumlocution. I smiled to myself, for the point to which he guided me so skilfully was one I had reached long before on my own account. Now he is dead and I am alive and kicking. All of which suggests that silence is golden.—The Lancet.

RELOCATION

Dr. Paul A. Jones, formerly of Huntington, who has been located temporarily at Durham, North Carolina, has moved to Zanesville, Ohio, where he will continue the practice of his specialty of radiology.

NEW SURGEON GENERAL, USPHS

Dr. Leonard A. Scheele, Director of the National Cancer Institute, has been appointed by President Truman as Surgeon General of the United States Public Health Service. He succeeds Dr. Thomas Parran, who has held the office since 1936.

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NONTUBERCULOUS PULMONARY CALCIFICATION

Recent surveys, particularly those in certain sections, such as Kansas City, Missouri, and Tennessee, have revealed a large number of persons with areas of calcification in their lungs and negative tuberculin tests. Such a situation is ordinarily interpreted as evidence of anergy and is encountered in cases of miliary tuberculosis and sometimes during other active acute infections, notably measles. It is known, however, that certain other conditions, such as coccidioidomycosis in the active stage or end stage, may give similar roentgenographic findings, but the latter disease could not account for the findings in the recent studies.

Extensive studies in several areas among school children and student nurses have indicated a close correlation between the incidence of those who are tuberculin negative and x-ray positive and that of positive reactors to histoplasmin. This is particularly close in persons with disseminated areas of calcification in the lungs. The findings suggest that histoplasmosis or some other disease that produces pulmonary lesions and results in sensitivity to histoplasmin is prevalent. Interestingly enough, the regions where the incidence of x-ray positive, tuberculin-negative and histoplasmin-positive cases is the highest correspond to those from which proved cases of histoplasmosis have been reported. Among student nurses the area of highest incidence was found in the eastern central states, and the frequency of the occurrence of such cases diminished progressively in proportion to the distance from this area.

The surveys that included histoplasmin skin tests have also resulted in the discovery of cases of active pulmonary disease among children in Kansas City, Missouri, and among student nurses in several states. The pulmonary lesions simulated those of tuberculosis and eventually went on to calcification. There are no known criteria for differentiating these roentgenographic lesions and those of tuberculosis.—New England Journal of Medicine.

STREPTOMYCIN IN TULAREMIA

Some of the most striking clinical results obtained to date with streptomycin have been those which followed its use in the treatment of tularemia. In this disease streptomycin has clearly established its value. In the past, patients who had tularemia were frequently ill for as long as twelve to sixteen weeks and many failed to survive. To date no failures have been reported in cases in which tularemia has been treated with streptomycin. The average dose of streptomycin used has been 2 gm. per day for seven to ten days. The clinical improvement is dramatic and recovery has been uneventful in all forms of tularemia treated.—Wallace E. Herrell, M. D., in Journal-Lancet.

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The Sun giving light and heat and the moving air tempering these effects are necessary for healthful living. Games, sports, swimming, and all outdoor exercise make for physical fitness, without which no nation survives. Children, particularly, must have their quota of healthful outdoor play, for growing, for strength, for straight backs, for good posture. Good posture must be continuously stressed. Less than 10 per cent of our school children have good body mechanics despite all the programs on physical education of which we hear. Good posture must be taught to children and asiduously cultivated from their earliest days to prevent future illness, fatigue, and tension.—Madge C. L. McGuinneeb, M. D., in Med. Woman's Journal.

TOLERANCE IN TREATMENT

There are certain physicians who, after finding no physical cause for the patient's complaint, feel a definite sense of frustration which may be expressed in the statement, "You have no physical disease and I cannot help you—you just think you are sick." After such remarks some physicians lose all interest in the patient and often hope he will not return.

Another physician, in attempting to follow some physical treatment method for the emotionally distressed patient, may say, "Your blood pressure and heart action are not exactly normal and we must start treatment." Both decisions are probably in error—the first because it shows lack of tolerance, interest and understanding, and the second because of his symptoms. This conclusion will thus tend to foster invalidism.

The best stimulus to good patient-physician relationship is an attitude of wholehearted, sincere interest on the part of the physician, along with a willingness to listen carefully at least once to the patient's entire story of his complaint problem.—Addison M. Duvol, M. D., in Virginia Medical Monthly.

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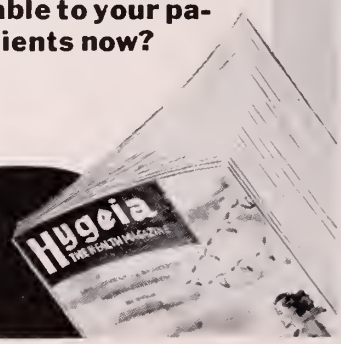

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CARCINOMA OF THE COLON AND RECTUM*

By HU C. MYERS, M. D., A. KYLE BUSH, M. D., and MELVIN LEA, M. D.
Philippi, West Virginia

Carcinoma of the large intestine is a common disease. It usually produces symptoms soon after its onset and thus can be recognized early. If the disease is discovered before metastasis has occurred it can be completely eradicated. If allowed to go untreated, it invariably proves fatal, and for this reason the patient should have the benefit of immediate surgical consultation and treatment.

Cure of carcinoma of the colon and rectum depends upon four circumstances: (1) The patient must recognize the early symptoms. (2) The examination must be thorough enough to insure a positive diagnosis. (3) The patient must be persuaded to undergo the necessary surgery. (4) The operation must be radical.

PATHOLOGY

A carcinoma may start wherever epithelial tissue is found. It may originate in the lumen, or the glands, of any part of the colon, rectum, or anus. Statistics show that the most common site is the rectum; then, in order of lesser frequency, the left colon, the right colon and the transverse colon may be involved.[1,2] The degree of malignancy varies as does neoplastic disease in other regions. The tumor may be highly anaplastic and thus grow and spread rapidly, or it may be of low grade malignancy and remain localized for months or years. Fortunately, the large majority of these tumors are grade II[3] by Broders classification and thus direct extension is slow as are regional and distant metastases. The tumor may start in an adenoma, a papilloma, a polypus,[4] or in apparently normal epithelium. The growth varies in its gross characteristics according to the size and function of the part of the intenstine involved. In the right half of the colon, which normally has a large lumen and fluid fecal stream, the tumor rarely encircles the bowel or causes early obstruction. Rapid absorption of intestinal contents leads to an early and at times profound anemia. In the left half of the colon the lumen is small and the fecal contents semisolid; these conditions often lead to an early encirclement of the bowel by the new growth with consequent obstruction. Acute obstructive symptoms may be the first signs of the presence of the disease in this region.

The neoplasm more often is an adenocarcinoma although not necessarily so. Metastasis to regional lymph nodes or to the liver by way of the portal vein is usually late. Spread by direct extension is commonly found only in cases which have existed for months or years. Because of the fact that the disease usually remains confined to the bowel for a long period of time, extirpation of the affected segment can reasonably be expected to effect a cure.[5]

SYMPTOMS

The symptoms of carcinoma of the colon and rectum vary with the location of the neoplasm, the grade of the lesion, and the stage of the disease. In general, they may be grouped in three categories, the first of which is change in bowel habits, the second, blood in the stool, and the third, pain.[6]

*Presented before the Marion County Medical Society, at Fairmont, April 28, 1947.

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COLLEGE OF

A change in bowel habits may indicate diarrhea or constipation. Usually, carcinoma produces an increasing constipation because of the size of the growth or its constricting effect on the lumen of the intestine. However, a slowly growing lesion which ulcerates early may produce diarrhea. Incontinence of feces may occur if the lesion involves the anal sphincters.

Blood in the stools (melena) is an almost constant symptom and is frequently noticed by the patient at an early date. Practically always blood is mixed with the stool instead of being streaked on it, as is the case with hemorrhoids. It is usually a dull red if the neoplasm is low in the ampulla of the rectum, and a darker red if the lesion is high. Frequently, it will contain mucus, pus, and debris.

Pain is almost always a late symptom. As a rule, it does not appear until the lesion has produced partial obstruction, or has involved the peritoneum, or caused pressure on nearby nerve plexuses.

Other symptoms which may occur are nausea and vomiting, abdominal distention, loss of weight, loss of strength, anorexia, anemia, et cetera. Most of these appear at a late stage of the disease and are thus of little significance when considering curable cancer.[7] A large percentage of patients give as their chief complaint "piles" or hemorrhoids. The actual symptom which the patient has noticed may be blood in the stool, or pain in the rectum, or diarrhea, or constipation. Usually, he has been told by some well meaning friend that his symptoms probably are caused by hemorrhoids, and he has adopted the diagnostic term as being descriptive of his complaints. This happening is so common that the physician must be constantly on guard to discount completely any such statement by a patient and must inquire into the true subjective symptoms. Even if the patient is right and hemorrhoids are found, it should be remembered that they are very common and may coexist with carcinoma or other disease of the rectum. A thorough search for an abnormal mass or growth in making a rectal examination, regardless of the discovery of hemorrhoids, is the only sure method of discovering early malignant lesions.

EXAMINATION

Physical examination, except for the findings in the rectum, is usually unrevealing until the disease is far advanced. A mass may be (but usually is not) felt through the abdominal wall. Anemia may be an early finding in carcinoma of the cecum.[8] Carcinoma of the rectum almost always presents a palpable mass on rectal palpation and neoplasms of the pelvic colon frequently can be felt if the patient is asked to strain during the examination. The character of the stool should be noted.

Proctoscopic examination should be a routine procedure in all cases of suspected disease of the colon and rectum. A sigmoidoscope should be inserted to its full length. The last 4 centimeters are often the most important. A biopsy must be done on all neoplasms and ulcers as this will render a true diagnosis in almost every case.

If no lesion is felt on rectal examination and none is found on proctoscopy, the patient should have the benefit of a radiologic study of the colon. A barium enema is given and the entire colon is studied by fluoroscopy and then by roentgenograms. Often a double contrast enema is given by injecting air into the colon after expulsion of part of the barium suspension. Deformities of the colon are studied by taking views from various directions. Carcinoma of the colon and rectum must be differentiated from adenoma, papilloma, polypus, various types of ulcerative colitis, diverticulitis, et cetera. The diagnosis usually is based on the findings as above outlined. The final diagnosis, however, rests with the biopsy report.

A study of the habits of people shows that human beings are prone to do things the easiest way. We think physicians are no different from most people in that they will not make certain examinations or carry out certain procedures habitually if these prove too troublesome. Rectal and proctoscopic examinations will be done frequently only if it is convenient, and that means that gloves, a proctoscope, a suction machine, and an office attendant are at hand when needed. Thus, the office nurse should see that all necessary apparatus is accessible and in working order at all times and that cleansing enemas are given the patient so that a complete rectal examination can be done easily and without delay.

TREATMENT

Treatment is divided into palliative surgery for advanced disease and curative surgery for carcinoma which is still localized. If the neoplasm has become adherent to surrounding structures and if there are metastases to the regional lymph nodes or to the liver, then a colostomy usually is all that is indicated. However, one should not be misled into thinking that all enlarged nodes are metastatic as a considerable number of these will be found to be inflammatory. Radical surgery is indicated in all cases without metastases and even in some cases in which metastasis appears to have taken place.[9] Some surgeons have advo-

cated resection of the rectum for carcinoma in this location even if there are definite nodules in the liver.[10] If an attempt is to be made to cure the patient a radical operation is recognized as the procedure of choice. By radical operation is meant removal of a large section of the intestine plus its regional lymph nodes. On the right side of the colon this usually means resection of the entire right half of the large intestine and establishment of an anastomosis between the ileum and the transverse colon. This is done in a one stage operation unless there has been definite obstruction. When the neoplasm is located in the transverse colon, a segment of this portion of the intestine usually is removed, and a primary anastomosis established. In the descending colon and sigmoid, a resection with primary anastomosis is the procedure of choice. This is not applicable to obstructive lesions, however, unless the colon is first decompressed by a cecostomy or transverse colostomy, and there has been adequate preoperative preparation with one of the sulfonamides. A Mikulicz procedure often is the safest type of operation for this region. In the rectum a resection with primary anastomosis can be performed if the lesion is high. If the lesion is low in the ampulla of the rectum, it is necessary to resect the entire rectum and follow this with a permanent colostomy.[11] It is our opinion that the lesion should be at least 10 centimeters above the anus if a primary anastomosis is to be done, since we believe that 5 centimeters of bowel should be resected distal to the lesion.

Convincing a person that operation for carcinoma of the colon is the necessary and proper treatment for him often is difficult, especially if a colostomy is contemplated. Many laymen still believe that there is no cure for this disease and that "cutting" for a cancer makes it worse. These ideas must be dispelled by the physician who first makes the diagnosis. If he is to carry out his responsibility to the patient, he must have facts and figures at his command to contradict the misinformation which is so common. In spite of the fact that he ordinarily does not like to do so, he must use the full force of his personality, if necessary, to persuade the reluctant individuals to undergo the proper treatment. If he cannot persuade the patient to submit to the right course of action, he may consider himself to have failed in an important duty.

Recently, we have reviewed 34 consecutive cases in which surgery has been done by us for carcinoma of the colon and rectum during the past fourteen years. Eight had palliative operations (colostomies) only. The average survival time of these patients was two and one-half months, the longest being six months. One was an operative mortality which was reported in the *Journal* (January 1946). There were 26 definitive operations with no operative mortality. One of these patients is living and well after fourteen years, one was operated upon a few weeks ago. Of the 26 patients, 20 are living and without present evidence of metastasis; 6 have died, 4 of metastatic lesions, 1 of uremia, and 1 of coronary occlusion. Most of those living have not been operated upon a sufficient length of time to be called five year cures. The accompanying tables show a summary of the symptoms, mortality, length of hospital stay, and other pertinent factors.

Table 1.

Total Number of Cases	34
Palliative procedures	8 or 23.5%
Definitive procedures	26 or 76.5%

Table 2.
Operative Mortality and Morbidity

Operative Mortality	3.3%
Average hospital stay	33.5 days

Table 3.
Age of Patients

Youngest	28 Years
Oldest	79 Years
Average	57 Years

Table 4.
Duration of Symptoms*

Longest period	60 months
Shortest period	0 months
Average period	15.3 months

*Average for Pennsylvania (Foss) 8.17 months.

Table 5.
Symptoms in Order of Frequency

Constipation	75.7%
Blood in stools	69.6%
Gas	66.6%
Cramping	57.5%
Nausea	30.3%
Weight loss	30.3%
Diarrhea	21.2%
"Hemorrhoids"	21.2%

Table 6.
Palpable Mass*

Abdominal	21.2%
Rectal	48.4%
Total	69.6%

*88.8% of rectal neoplasms were within reach of the examining finger.

SUMMARY OF ANALYSIS OF CASES

An analysis of 34 cases of carcinoma of the colon treated by us since 1933 revealed the following significant facts:

There were 8 palliative operations, and 26 definitive operations. All patients who had palliative surgery have since died, 6 of metastases, 1 of coronary occlusion, and 1 of intestinal obstruction. Of those who had definitive procedures 20 are living and well; 4 have died of metastases,

1 of coronary occlusion, and 1 of uremia. One of the living patients is well at the end of fourteen years. We cannot report on five year cures since 24 of the operations have been performed within the past five years.

The ages of the patients varied from 28 to 79 years, the average age being 57 years.

The duration of symptoms varied from 0 to 60 months, the average being 15 months. Three of the patients had no symptoms, the lesion being found on a routine examination.

The symptoms in order of frequency of occurrence were constipation (25); blood in the stool (23); gas (22); cramping pains in the abdomen (19); nausea and vomiting (10); weight loss (10); diarrhea (7); hemorrhoids (8).

The lesions were distributed through the entire colon, 19 being found in the rectum, 6 in the sigmoid colon, 5 in the transverse colon, 3 in the descending colon, and 1 in the right colon. Of these lesions, 8 could be felt through the abdominal wall, 21 were palpable on rectal examination. The remaining lesions were found by proctoscopic and roentgen examinations.

COLOSTOMY

A discussion of carcinoma of the colon and rectum would be incomplete without a statement regarding the so-called "horrors" of colostomy. Most laymen and even some physicians refuse to consider an operation which would produce an artificial anus. Some persons would reject an artificial anus of the abdominal wall, but would accept one if implanted in the perineum.

Two factors have contributed to the unpopularity of abdominal colostomies. One is the colostomy bag. It is dirty, bunglesome, and carries a tell-tale odor which remains in spite of the most thorough cleansing. It is not necessary. Small pouches with disposable napkins are available and may be used if the patient insists on more security from leakage than is afforded by a dressing. The other factor is that colostomy has been used so frequently for incurable carcinoma of the rectum. This type of colostomy, of course, is never satisfactory because the patient still has his carcinoma with its increasing pain. With this discomfort plus the psychologic effect of the knowledge that he is incurable, it is small wonder that he hates his colostomy and blames his distressing condition on it.

Those who have had experience with abdominal colostomies know that they cause very little trouble if reasonable attention is given the colon and if roughage is omitted from the diet. The care is very simple. A small pad worn over the opening is held in place by an elastic band. The pressure which the pad makes is effective in preventing leakage. Once a day or once every second day the patient takes an enema. This is given by the patient himself while in a semi-reclining position and is expelled in a small basin. It takes about thirty minutes to complete the procedure, but when it is done the patient can go about his daily work without fear of a disaster. *Not one of our patients with a permanent colostomy, performed as a part of a definitive operation, seems to regret having had the procedure done.* This speaks well for abdominal colostomy.

CONCLUSIONS

Carcinoma of the colon usually is a neoplasm of slow growth producing early suggestive symptoms, and situated in such a location as to make the diagnosis relatively easy and accurate. Early, radical operation yields a high percentage of cures. Improvement in technic following the introduction of chemotherapeutic agents and the antibiotics has produced results which compare favorably with the treatment of carcinoma of other regions.

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The tendency of rheumatic fever to recur is one reason why this disease is so difficult to control. It is known that the disease is particularly likely to recur the first year after an attack and during childhood and early adolescence.—Robt. L. Jackson, M. D., in J. Iowa St. Med. Soc.

TRICHOBEZOAR: REPORT OF A CASE

By R. J. WILKINSON, M. D., F.A.C.S., and ALBERT SHEADE, M. D.
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Debakey and Ochsner,[1] in reviewing the world literature on bezoars, found mention of 171 cases of trichobezoar, and added one case of their own. Valuable contributions on the subject were made by Matas,[2] Maes,[3] Butterworth,[4] Davies,[5] and Kerr and Rypins.[6] The senior author, in his surgical experience, has observed four cases, one of which is reported in this paper.

Barkley[7] stated that trichobezoars more often are found in persons suffering from neurosis, dementia or idiocy, and especially in females. A review of the literature will confirm the latter observation, but in the opinion of Matas[2] insanity or mental derangement does not play an important part. This opinion is substantiated when viewed in the light of the statistics of Debakey and Ochsner.[1] They state that only 13.9 per cent of the collected cases reported demonstrated mental or psychic disturbances. Lewis Golden[8] states that the swallowing of human hair which leads to the formation of trichobezoar may best be understood when viewed as an "habitual body manipulation". With proper psychiatric examination, other symptoms of a disturbed personality may be discovered.

There have been few instances of recurrence recorded.[9,10] One[9] patient was operated on five times for recurrence; another[10] was eating hair at the time of discharge from the hospital. The low incidence of recurrence would support the belief that mental derangement plays an important role.

It is interesting to note that the age group in which the condition is most frequently found is in the second decade,[1] which comprises 36.6 per cent of the cases in which the age was recorded. Undoubtedly the onset in most of the cases was in the first decade, the patients being presented for treatment somewhat later with the development of symptoms.

The clinical manifestations in general are those that would be expected to accompany a tumor within a hollow viscus, with the exception that the symptoms are less severe. By far the most frequent complaint is an abdominal mass noted by the patient or the family for a variable period before medical aid is sought. Pain, abdominal tenderness, nausea, vomiting, diarrhea, constipation, weakness, weight loss and hematemesis are noted in case reports. Surprisingly enough, in less than 50 per cent of the cases can a history of trichophagia be obtained. The diagnosis usually is made by means of x-ray examination, but the condition should be borne in mind in the differential diagnosis of upper abdominal tumors, particularly in persons in any one of the first three decades of life.

The operative mortality has been rather high. Of 124 cases operated upon, 6, or 4.8 per cent, died.[1] The nonoperative mortality, 72.7 per cent, however, is such as to make surgical intervention almost mandatory.

CASE REPORT

An eleven year old white female entered the Chesapeake and Ohio Hospital August 2, 1946, with an initial complaint of a "knot in the pit of her stomach", which was first noticed by the child six months before admission. The "knot" had been growing progressively larger. The mother stated that the child had lost about ten pounds in weight during the six months prior to admission. No particular weakness was noted, and the child was as active as she had been before onset of the illness. Although the mass was noted in February, she was allowed to continue in school because of her apparent normal behavior and lack of subjective symptoms which were limited to a poor appetite at suppertime. Other than this and a severe cough for two weeks prior to admission, there were no symptoms referable to any system. The past history and the family history were noncontributory.

On examination there was a mass in the epigastrium with its longest diameter in the horizontal plane. The mass extended from the xyphoid process above, to midway between the xyphoid and the umbilicus. The left border of the mass was approximately 5 centimeters to the left of the midline and the right border was continued under it. The mass was firm, with a nodular surface, and moved downward about 3 centimeters on inspiration.

Urinalysis and differential blood count were normal. Total proteins, 7.35; blood sugar, 65; blood chloride, 440.

Operation was performed August 24, 1946, under cyclopropane and ether anesthesia. A left paramedian incision was made and the stomach delivered into the wound. A longitudinal incision was made in the anterior wall of the stomach midway between the greater and lesser curvatures, and was extended from approximately 3 centimeters beyond the cardia to a point 5 centimeters from the pylorus; through this the hairball was removed. The incisions in the stomach and abdomen were closed and a Levine tube was introduced intranasally.

Postoperatively, a cough with expectoration developed after the patient recovered from the anesthetic, and lasted six days. There were no findings of pneumonitis or atelectasis on physical examination.

On the second postoperative day, the serum protein level dropped to 4.71, but returned to a satisfactory level, 6.78, on the fifth postoperative day with the use of plasma. Since amino acids given intravenously caused nausea and vomiting, they were discontinued after 500 cc. of a 6 per cent solution had been given.

Starting on the second postoperative day, the Levine tube was clamped off for twenty minutes every two hours, and on the third postoperative day a small amount of jello and custard given orally was retained. The suction was discontinued thereafter. The amount of feedings was gradually increased so that on the sixth postoperative day the patient was tolerating a soft diet.

Ambulation was started on the second postoperative day, and the patient was discharged on the ninth postoperative day.

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ALCOHOLISM A CRUTCH

Alcoholism, once considered a habit or a sin, is now looked upon as a crutch, a psychologic escape, for an inadequate, immature, hypersensitive, or emotionally unstable personality. Alcoholism may be a symptom, the chief complaint, a complication, or it may be used by the patient as treatment for his defective personality.

The difference between normal and abnormal drinking is not so much a matter of jiggers and pints as it is of the personality of the drinker. Anyone who finds mental relief and solace from alcohol, and who thereby uses it to excess, is a chronic alcoholic.—John D. Campbell, M. D., in J. Med. Assn. Georgia.

POSTMORTEM CESAREAN SECTION DELIVERY OF TWINS, WITH SURVIVAL

(CASE REPORT)

By FREDERICK H. DOBBS, M. D.,
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Nineteen cases of successful postmortem cesarean section have been reported in the literature from 1931 to 1947 for the entire world and of these only nine occurred in the United States. Texas (a twin pregnancy), West Virginia, Nebraska, District of Columbia, Iowa, Missouri and Massachusetts were the states mentioned. The principal causes of maternal deaths were nephritis complicated by convulsions, cerebral hemorrhage, pneumonia, and pulmonary edema. The case reported is the second postmortem cesarean section on twins, with survival.

CASE REPORT

An 18 year old primipara was admitted to the hospital, not in labor, May 28, 1947, with the chief complaint of generalized edema. The past history was noncontributory. The patient had had a five day hospital admission in 1946 for nasopharyngitis with a normal blood count and normal urine specimens. Menache occurred at 14 years of age with irregular 3 to 4 week intervals and a six day flow. The estimated date of confinement was May 29, 1947. The pelvic measurements were within normal limits.

Except for morning sickness, the prenatal course had been uneventful until 6 weeks before the confinement date when edema appeared in the ankles and spread progressively up the legs, thighs, vulva, abdomen, face and hands. The vulvar edema was so severe that the most dependent portion of the right labium had been incised, with no reduction of the edema. In addition, the patient suffered from lassitude, vertigo, and fatigue during this period, but her appetite remained good and the output of urine was adequate. There was rapid increase in the size of the abdomen in the last trimester. Fetal movements caused abdominal and lumbar pain. The patient's usual weight was 124 pounds, and her height 70 inches. The weight on admission was 165, a gain of 41 pounds.

HOSPITAL COURSE

5-28-47: The patient was admitted with a temperature of 100.6 F., pulse 100, respiration 22. On physical examination the outstanding objective symptoms were the pale, white color of the skin, the marked enlargement of the abdomen, the shallow, rapid respirations, with restlessness and anxiety. There was no departure from nor-

mal in any of the systems. The heart beat was regular and rapid, with normal rate and rhythm. The lungs were clear. The blood pressure was 152 systolic and 94 diastolic. Blood count: hemoglobin 42 per cent, red blood cells 2,600,000, white blood cells 7,600, with a normal differential distribution. A catheterized urine specimen was normal. X-ray revealed twin fetuses approaching full term in vertex position. No evidence of monstrosity or dystocia was noted. No chest pathology was present. The diagnosis of toxemia of pregnancy (hypertensive vascular disease) complicated by a twin pregnancy was made. The dependent edema, especially of the vulva, was believed to be due to the enlarged uterus. The respiratory distress was due in part to the generalized edema, and the splinting of the diaphragm to the enlarged uterus. Treatment was directed toward reducing the edema and the unexplained temperature by giving 150 cc. of glucose (50 per cent), intravenously immediately followed by 2,000 cc. of glucose (5 per cent) in distilled water to which was added 5 Gm. of sodium sulfadiazine. Preparations were made for a cesarean section but were delayed until the anemia was corrected and the respiratory symptoms controlled. During the night the patient received three transfusions of 500 cc. each of citrated blood without reaction. The blood count the following morning was: hemoglobin 58 per cent, red blood cells 3,000,000, with a color index of 0.8.

5-29-47: During the second day, sulfadiazine (Gm. 1), with alternate ounce doses of magnesium sulfate and sodium phosphate, was given every four hours, which produced many liquid stools but no reduction of the edema. The fluid intake was 4,500 cc. and the output 3,200 cc. for the twenty-four hour period, which did not include the fluids lost in the stools. Small amounts of food were taken and retained and some improvement was noted. The temperature remained normal early in the day but at 4 p. m. rose to 102 F., the pulse and respiration remaining essentially unchanged. Breathing became rapid and labored, and restlessness returned. She was placed in semi-Fowler's position which afforded some relief. Examination disclosed coarse rales in the right lung, more prominent in the right lower lobe, with some tubular breathing. Consolidation was not present. During the night subjective symptoms of respiratory pathology developed: pain between the shoulder blades and in the right chest, more severe on deep breathing and coughing. Small doses of codeine sulfate controlled the pain. The temperature at 1:00 a. m. was 100.2 F., the pulse 110 and the respiration 28. At 6 a. m. the temperature was 102 F., the pulse 120, and the respiration 30.

5-30-47: On the third day, an x-ray of the lungs showed a diffuse density throughout the right lung field, having the appearance of an extensive pneumonia which had not been present on previous x-ray examination. Penicillin 100,000 U. was given immediately, followed by 50,000 U. every three hours. Food was refused but large quantities of water were drunk and voiding was frequent. There were several liquid stools. One thousand cc. of glucose (20 per cent), together with 10 cc. of magnesium sulfate solution (20 per cent) were given intravenously. Cyanosis and marked air hunger developed. Oxygen was administered by the tent method but this did not relieve the respiratory distress. The patient became restless and moved aimlessly about the bed.

It was the opinion of a medical consultant that the condition was that of acute pulmonary edema secondary to acute left ventricular failure; contributing factors were the underlying hypertensive vascular disease, reduction of vital capacity by the enlarged uterus pressing upon the diaphragm, and the "trigger" responsible for the break in compensation, namely, diffuse bronchopneumonia. Strophanthin was given intravenously but she expired during its administration. Since it was obvious that a fatal termination was inevitable, permission was obtained and preparations made for a postmortem cesarean section. It was assumed that the twin fetuses were viable but it was impossible to check the fetal heart tones because of the patient's loud, rapid breathing and restlessness. Two teams of residents and nurses were formed, and resuscitators, instruments, gowns and gloves made ready. At 6:25 p. m. the medical consultant pronounced the patient dead. Immediately a large midline abdominal incision was made down to and through the uterine wall, and enlarged above and below. The first twin, a boy, was delivered, the cord clamped and cut, and aspiration and resuscitation begun immediately. The second twin, also a boy, was treated in a similar manner. The entire operation was completed in less than one minute. The placenta was delivered almost immediately, and the abdominal incision closed. Autopsy was refused. The first twin, weighing 6 pounds, 5 ounces, was cyanotic and the upper respiratory passages were filled with amniotic fluid. The second twin, weighing 6 pounds, 6 ounces, cried spontaneously and recovered almost immediately. Both infants were placed in incubators for the first twenty-four hours and then removed because their condition was satisfactory. Twin no. 1 continued slightly cyanotic

and raised small amounts of clear fluid. Both infants left the hospital in five days in good condition. Twin no. 1 later returned to the hospital suffering from a mild upper respiratory infection and a feeding complication, but these were cleared up in four days.

The placenta was large and consisted of two separate placentae fused in the midline. There was a separate cord and sac for each placenta. The infants were assumed to be dizygotic twins.

COMMENTS

1. This patient was not seen by any member of the hospital staff before her admission May 28, 1947.

2. A cesarean section was contemplated within twenty-four hours of admission and preparations were made for this procedure.

3. She did not respond to the usual measures used to combat edema, i. e., hypertonic glucose solutions and magnesium sulfate.

4. Three blood transfusions raised her hemoglobin from 42 per cent only to 58 per cent, and the red blood count from 2,600,000 to 3,000,000.

5. The upper respiratory infection present on admission developed into diffuse bronchopneumonia which precluded operation.

6. The infection was not affected by sulfadiazine or penicillin.

7. It is believed that pneumonia was developing on the day of admission but it was not recognized until the second hospital day.

DISCUSSION

Moran, Titus and Stander discuss the origin and development of postmortem cesarean section from the Lex Regia and Lex Caesarea to the present day modern technique of cesarean section. Moran states: "Postmortem cesarean section is the oldest known major surgical operation. The Roman Senate decreed in the year 715 B. C. that no woman, advanced in pregnancy, would be admitted to sepulchre until her child had been removed from her body by this operation. This was one of the earliest of the Roman legislative acts. In the year 1749 the King of Sicily passed the sentence of death upon a physician who failed to perform the cesarean operation upon a woman who died in the advanced stage of pregnancy. The Senate of Venice in 1608, proclaimed the imposition of severe penalties upon every medical man who should attempt this operation on a woman supposed to be dead, without exercising the same care and caution as if she were living. History relates more than one instance in which an incision had been made into the abdomen of a supposedly dead woman (really in syncope) for the purpose of extracting her child; subsequently it was shown that she was still living."

The responsibility of the physician when confronted with this situation is not clear-cut or defined by law. When permission is obtained from the husband to perform a postmortem cesarean section, there is no problem; but situations will arise, especially following accidents or cerebral hemorrhage, when the consent of a responsible party cannot be obtained at the time the operation should be performed to save the baby. This dilemma must be solved in each individual case by the attending physician, but he should not be penalized for attempting to save the baby. Bacon expressed the following opinion: "A cesarean section made before life ceases to exist, would not be at the discretion of the physician, and certainly could not be justified if done without the husband's consent, much less against his prohibition." He further comments: ". . . after the death of the spouse, the rights of the child then become paramount and the operation may be performed without his consent and even against his will."

The laws of this state concerning the violation of the patient's person, either living or dead, are well defined. Litigation has resulted when the physician has operated without consent, or has exceeded the scope of a planned procedure, or has performed an autopsy without proper authority. According to common law, only in the case of emergency may the rules relating to securing consent for operation be disregarded. It must be shown that an emergency exists at the time of operation.

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Headache is a respectable and socially accepted illness, being nearly as common a subject of conversation as the weather, and equally tiresome.—William C. Egloff, M. D., in J. Iowa State Medical Society.

OFFICE TREATMENT OF SYPHILIS WITH PENICILLIN

By DON V. HATTON, M. D.,
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Penicillin is becoming more firmly established in the treatment of syphilis. One of the obstacles to its widespread adoption for this purpose has been the necessity of hospitalizing the patient for a period of eight to fifteen days for the administration of the drug. Such a hospital stay entails absence from work, additional expense, not to mention the disinclination of the person, who usually is not ill, to being confined to the hospital room or bed. So long as penicillin has to be used on a three-hour schedule, such hospitalization is mandatory.

The literature is replete with reports on the results of treatment of syphilis with penicillin. However, most of these reports pertain to the administration of 30,000 to 50,000 units every three hours under hospital conditions. In spite of economic and other reasons which have been advanced against hospitalization for treatment of this disease, the results have been so satisfactory that some other method must be developed which will allow for treatment of the ambulant patient.

It was, therefore, decided to use a plan of treatment for ambulatory patients, employing 300,000 units of penicillin in oil and wax (prepared according to the Romansky formula), giving one injection each day for a period of fourteen days, a total dosage of 4,200,000 units. It was also planned to give the patient during this period four injections of mapharsen (total 0.160 Gm.) and three injections of bismuth subsalicylate in oil (total 0.36 Gm.). Following completion of this treatment schedule, blood tests were to be made one month, six months, nine months, and one year later.

Sixteen cases received treatment as outlined above. These were classified as early syphilis, 6 patients; latent syphilis, 8 patients; serologic relapse, 2 patients.

Spinal fluid examination was performed on all patients except three who were in various stages of pregnancy. No cases of neurosyphilis were included in this group. The duration of the infections treated varied from nineteen years in one latent case to six weeks in one early case. Six patients had either a primary lesion or a secondary eruption. No patient was treated without confirmatory laboratory evidence of infection (positive blood Wassermann or positive darkfield).

The age of the patients varied from twenty-one to forty-nine. All of the latent cases had received previous chemotherapy in varied amounts and forms. Thirteen of the patients had positive blood serology tests, the Kahn titre varying from 1:40 to 1:1. Three patients were in the negative phase of primary syphilis. Primary and secondary lesions healed promptly. The three early cases with positive blood Kahn tests became negative six months after treatment. Five of the eight latent cases demonstrated changes in the titre of the Kahn reaction but remained in the positive phase. The other three latent cases exhibited negative blood serology six months following completion of treatment. There were no substantial changes in serologic results nine months after treatment although slight changes in titre were noted. The two cases termed 'serologic relapse' had negative blood tests six months after treatment. The three early cases with negative bloods also had negative blood tests six months following termination of treatment.

All patients treated were private patients. It was carefully explained to the individual that the treatment probably would be beneficial but that no 'cures' could be promised. Each patient continued at his work. Penicillin preparations from several standard manufacturing companies were used. All blood tests were carried out by the West Virginia State Hygienic Laboratory and were Kahn quantitative procedures. It is, of course, recognized that serologic tests may not closely parallel improvement in the clinical condition. However, favorable changes in the titre of a quantitative procedure generally have been considered as indicative of favorable progress.

The only untoward reaction noted was the development of severe urticaria in one case ten days after completion of the course of treatment. Local swelling and tenderness at the point of injection was fairly common but this was expected in view of the slowly absorbable product used.

The two cases termed 'serologic relapse' were so called because of the fact that the blood which had become negative following previous penicillin therapy later reverted to the positive phase. Clinical symptoms were not present in these cases.

SUMMARY

(1) Six cases of early syphilis, eight cases of latent syphilis, and two cases which had 'serologic relapse' received office treatment consisting of fourteen intramuscular injections of penicillin in oil and wax, 0.160 Gm. of mapharsen, intravenously, and 0.45 cc. of bismuth subsalicylate in oil given intramuscularly.

(2) All of the cases of early syphilis responded with the disappearance of lesions and the de-

velop and maintenance of negative blood tests. These cases have not been observed long enough to determine the possibility of relapse but at least it may be said that no relapse had occurred at the end of six months.

(3) Two cases classified as 'serologic relapse' showed negative blood tests following treatment.

(4) Three latent cases had negative blood Kahn tests six months after treatment. The other five cases showed varied degrees of decrease in the serologic titre but none actually reached the negative phase. There was evidence that the Kahn titre was still declining nine months after the completion of treatment.

(5) Three of the patients were pregnant at the beginning of treatment. Clinically, none of the newborns presented any stigma of congenital syphilis. Of the three infants, a blood tests was taken on only one and this was negative.

CONCLUSIONS

The small number of cases presented in this study and the relatively short period of observation prevent final and definitive conclusions as to the value of the ambulant treatment of syphilis. It would appear, however, that treatment with penicillin in oil and wax is effective and can be readily fitted into a scheme of office treatment of this disease. It is possible that some other schedule of treatment may become established, but for the present, the administration if 4,200,000 units of penicillin in daily doses of 300,000 units each is satisfactory.

TB VULNERABLE TO CHEMOTHERAPY

During recent years studies in the antibacterial attack on tuberculosis have yielded results sufficient to change to a considerable degree many of the previously held therapeutic concepts of tuberculosis. Most important, it has been adequately demonstrated that this disease is no longer beyond the range of specific drug therapy. Instead, the vulnerability of tuberculous infections to a chemotherapeutic attack has been established experimentally and clinically.

While to date, the completely ideal anti-tuberculosis drug has not been reported, it seems probable that substances equal or superior in effectiveness to known agents may be found. These possibilities warrant expenditure of great effort, and this search may become one of the most important and exciting adventures in medical research.

In the meantime, streptomycin seems likely to become generally accepted as a useful drug in certain types of clinical tuberculosis. It must, however, be used intelligently, with full recognition of its shortcomings and limitations. It should frequently be used in combination with other effective methods of treatment, rather than as a substitute for such proved therapeutic procedures as care in a sanatorium, collapse therapy, and surgery.—William H. Feldman, D. V. M., M. Sc., and H. Corwin Hinshaw, M. D., Ph. D., D. Sc., in British Medical Journal.

RENAL ANOMALIES*

(CASE REPORT)

By CARL K. PEARLMAN, M. D.,
Veterans Administration Hospital,
Huntington, West Virginia

According to Lowsley and Kirwin, renal anomalies occur frequently and are exceedingly varied in type. Despite the fact that many anomalous kidneys cause no symptoms, the amassing of data from a wide range of material has made it plain that the abnormal kidney is much more likely to be the site of disease than is the normal organ. Failure to consider the possibility of congenital anomalies of the urinary tract may have disastrous results. In the following case death ensued.

B. F. K., a white male, age 27, was admitted to the Veterans Administration Hospital September 19, 1947, in a semicomatose condition. The history was obtained from his father. Five days prior to admission the patient was seized with pain in the left flank which was so severe that he fell to the ground. He was taken to his home where he remained for approximately twelve hours. He was unable to urinate and the pain persisted.

He was admitted to a hospital in the city in which he resided where he remained for two days. X-rays taken at that time were said to show a stone in the left kidney. Catheterization was necessary after which the patient was able to void spontaneously with slight dysuria. No record of the urinalysis was available, but the father said that approximately one pint of smokey urine was obtained on catheterization. The pain subsided and the patient was told that he evidently had passed a stone and that further hospitalization was not necessary. He returned home, remaining free of pain for two days. However, he complained of nausea and was able to tolerate only water and fruit juices which he took in large quantities. He continued to have slight burning at the end of urination. On the day prior to admission he began to pass bloody urine, and then suddenly was unable to void. On the day of admission he had a convulsion and was taken to the same hospital in which he had been treated previously. During the process of being admitted he experienced another convulsion and therefore was transferred to the Veterans Administration hospital in Huntington, West Virginia. A total of six convulsions occurred prior to admission.

Other than the usual childhood diseases the

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patient had never been seriously ill. He entered the service in 1944 and was discharged the same year for reasons unknown. His family history was noncontributory.

The patient was well developed and well nourished although dehydrated. He was in coma since he had just had another convulsion. His temperature was 99.2 F., pulse 110, respiration 20(?). The tongue was dry and macerated. The eyes had a glazed appearance. The pupils were dilated, equal, and reacted sluggishly to light. There were a few moist rales at both lung bases. The heart tones were of good quality; no murmurs were heard. The blood pressure was 170 systolic and 110 diastolic. The abdomen was flat and soft. No organs were palpable. There were no abnormal masses or hernias and no bladder dullness.

The blood count showed red blood cells 5,200,000; hemoglobin 110 per cent; white blood cells 18,000; polymorphonuclear 97 per cent; lymphocytes 3 per cent. The blood chemistry showed nonprotein nitrogen 150 milligrams per hundred cubic centimeters; creatinin 8.5 milligrams, and sugar 145 milligrams per hundred cubic centimeters.

The patient was catheterized and a few centimeters of urine obtained. Urinalysis disclosed albumin (4 plus) and an enormous number of red blood cells.

An x-ray examination of the chest showed increased markings throughout the hilar regions and increased markings at the left base suggestive of pneumonitis. A scout film of the kidneys, ureters and bladder showed an oval calcific shadow, approximately 4 by 3 millimeters in size, lying approximately one inch to the left of the midline in the bony pelvis. The kidney outlines were obscured by gas shadows.

COURSE IN HOSPITAL

The patient was seen by the neuropsychiatrist who witnessed a seizure and described it as epileptiform in character, consisting of clonic and tonic spasms during which time the patient bit his tongue. He was seen by the urologist, but it was obvious that he was too ill for any further diagnostic procedure such as cystoscopy.

Penicillin and infusions of dextrose (5 per cent) in water were started. The patient roused for a brief period but his condition became progressively worse. He lapsed into coma following a second convulsion and died seven hours after admission.

Autopsy disclosed congenital absence of the right kidney, the right ureter and the right half of the trigone. The left kidney was enlarged to about twice the normal size and weighed 386 grams. The pelvis contained purulent fluid. The left ureter was dilated in its entire extent. The dilatation was caused by a small calculus approximately 3 by 3 millimeters in size impacted in the intramural portion of the ureter.

COMMENT

The case reported will serve to emphasize the potential danger in anomalies of the urinary tract. Since an anomalous organ is more likely to be the site of disease, the function of both kidneys should be studied as promptly as possible. Thus the absence of one kidney can be discovered. Intravenous urograms are of great value and can be obtained with comparative ease. If these do not provide sufficient information, cystoscopy and retrograde pyelography should be done without delay. These procedures will aid in making an early and exact diagnosis and a decision as to treatment, whether by cystoscopic instrumentation or immediate surgery. If calculi are found, a policy of waiting may be adopted since many small stones usually produce no block and are passed spontaneously. However, in such cases the patient should remain under observation in order that immediate measures may be taken should symptoms of blockade occur.

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INCREASE IN PEPTIC ULCER

Peptic ulcer is the purple heart of modern civilization. Its incidence is alarmingly increasing under the impact of modern times and trends. To those individuals who are the victims of emotional strain, nervous tension, worry and anxiety possibility of upper digestive tract pathology is forever present. It is a consoling thought that from people of such description comes most of our really constructive work and accomplishment. It is such who have a tendency to an overworked gastrointestinal tract—and the likelihood of peptic ulcer is a portion of the price they are called upon to pay for their inheritance.—L. J. Starry, M. D., and Everett B. Neff, M. D., in J. Okla. St. Med. Assn.

CONCOMITANT SQUINT

By far the most frequently seen type of squint is the concomitant squint These cases we like to see, of course, when they are still accommodative in type, before they have become tonic. They ordinarily require little but the relaxation of accommodation and the presentation of equally clear images to the retina by a pair of glasses. And no child is too young for that. If we have the opportunity to investigate him early and find a significant refractive error, there will be no trouble in his wearing glasses tied around his head at as early an age as six months. If the error is sufficient to cause a squint, even a little one likes his glasses.—Abbott M. Dean, M. D., in J. Iowa St. Med. Soc.

The President's Page

The West Virginia State Medical Association is an organization of virile, progressive, right-thinking, broad-minded professional men. Its membership is formed by careful and discriminating selection of men in their particular calling, men who by virtue of their God-given talent can be called upon to cooperate cheerfully with their fellow members in actively supporting the medical profession in its steady, unfaltering march toward the attainment of its high ideals.

Every man must have his code of ethics; it is his hope, his vision, his land-of-the-beyond. The standard of the code makes the man; the higher the standard, the better the man. It is safe to say that no higher standard of a practical nature has been devised than the fundamental concept which runs throughout the medical code of ethics. One might repeat in summing it up, "To thine own self be true, and it must follow as the night the day, thou canst not then be false to any man."

We have a strong fellowship and acquaintance which are developed by mutual understanding and esteem. From this great melting pot of diversified energy and experience pours molten metal of the purest gold, which is freely used when it is needed. It is safe to say that 95 per cent of our profession live up to and appreciate the great value of our code of ethics. One of the real contributions that it makes is the inculcation in each member of a fine sense of perspective, a keen appreciation of fundamental life values, and a working knowledge of the relation of the forces of the spirit to better achievement in our profession. The success of the individual physician depends a great deal upon his spiritual intent, latent in all of us. Integrity, faith, and interest in the other fellow are certainly fundamentals worth recalling to our membership.

It is assumed that when a physician joins a medical society, he will not only have faith in his society, but will prove that faith by being active in its affairs. By doing so, he will improve the quality of service that he renders.

In these catastrophic times one profession and then the other is attacked from all sides. Most of the ills of the medical profession do come from within, particularly in the consideration of money values, but here I would like to state in the words of John Hays Hammond, "Money is a good thing to have if you get it the right way, but real success can lie only where there is service performed for the benefit of your patients and your community. There is no success other than that. With such success you deserve the esteem of your fellow practitioners and the affection of your patients, and if you have that there is no higher success that can come to any man."

The various professions afford opportunity to strengthen honorable and helpful human relationships, and all members of our profession should strive by example and influence to preserve the standards of ethical conduct against attacks by mercenary and commercialized interests. Your State Medical Association urges a keener sense of fundamental honesty and a more courageous application of the principles involved. We must strive to eradicate not only those forms of unfair competition which have been branded unlawful, but also those countless methods of deception and injury which are forbidden by the medical code of ethics and ideals.

Professional men should voluntarily develop and impose upon themselves standards of conduct which are above criticism, which will stand the full light of publicity, and which will tend to avert oppressive legislation. We should observe existing laws, oppose vicious practices and support new legislation to protect society. We should attack harmful legislation, see that it is defeated or repealed, and insist that fewer and better laws be enacted.

Finally, in all of our professional affairs, the application of the Golden Rule stands for all that is honorable, progressive and just. The inclination to measure things by quantity rather than quality warps the judgment of the man who would arrive at a just estimate. Remember that each of us has a definite contribution to make toward the total of the world's happiness and prosperity. The West Virginia State Medical Association is devoted to such ideals.

Thomas Bee

President.

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PROBLEMS OF THE AGED

Recently there appeared in this Journal* a stimulating article, "New Horizons for Old Age." The author makes a plea ". . . for the devotion of more thought, more research, and more funds to improve the lot of the largest and most neglected group of unfortunates in our society." We cannot quarrel with these sentiments; indeed we agree in the main with the philosophy of the entire article.

It is refreshing to know that the problem of geriatrics is being recognized and that this phase of medicine is receiving ever-increasing attention. In the past we have not set our sights high enough, for in the laudable purpose of helping the young we have overlooked the old.

In our zeal to care for the youngsters and for the oldsters we must not make the further mistake of neglecting the diseases of middle age. It is in fact these which so often cause trouble later in life and offer so fertile a field for the practice of truly preventive geriatrics. The entire matter may be summed up by stating that the individual should receive adequate medical care and supervision through each decade of life.

The author of "New Horizons for Old Age" speaks thus of a person being retired, ". . . by some blind compulsory retirement scheme" and refers to the hardship often afflicted on the aged by necessary retirement. This doubtless is true. It seems proper, however, at this point to issue a word of caution, or at any rate raise a question. Should positions which require great responsibility be held by really old men?

It is generally known that most colleges and universities throughout the land make retirement compulsory at some definite age. To be sure, this was waived during the last World War, but institutions are again enforcing their retirement rule. In point of fact, there is such a rule at West Virginia University.

It is true that any institution which enforces a retirement age occasionally loses prematurely the services of a valuable man. The author of the article upon which we are commenting illustrates this when he points out that Harvey Cushing, Mosely Professor of Surgery at Harvard, and Milton J. Rosenau, of the Department of Hygiene of the Harvard Medical School, were retired when each of these men still had much to contribute. These are, of course, exceptional instances. Some men have the spirit of youth until death takes them, while others are virtually born old.

Insofar as retirement in universities is concerned, a compulsory retirement age is doubtless a salutary thing. Although an occasional professor may be as good a man at seventy as he was at forty-five, surely the average individual is not. Unless great caution were exercised, ten unfit old men would be kept on the staff merely for the sake of keeping one man who apparently is fit. How can the president of a university or the dean of a college openly discriminate between an oldster who is unfit and one who is fit? God save the mark. It cannot be done without raising a storm of protest. The only solution to the matter is to set some arbitrary compulsory retirement age (not too low) and to abide by it. Over a period of years, if this be done, an institution will gain infinitely more than it will lose.

Perhaps too much emphasis has been laid on the college teacher, but much of what has been said applies also to other walks of life. It is true that retirement often causes great psychic trauma. This can and should be avoided. It behooves every individual to think of the time when he must give over his duties to a younger generation. Plans for retirement must be made in advance. An individual should not work mightily up to the age of retirement and then suddenly withdraw from everything. The central nervous system of man is not designed for such treatment; the

*Klumpp, Theodore G., West Virginia Medical Journal, February, 1948.

patterns of behavior have been developed over a period of many long years. New patterns should have been woven into life during middle age, so that when the day comes that retirement is inevitable, the individual may face it, if not with cheerfulness, at least with serenity.

MEDICAL SERVICE AT NIGHT

Recently there has been quite a hubbub raised rather generally over the country relative to the alleged inability of patients to have night calls answered. Notwithstanding the fact that it is estimated that nine out of every ten "emergency" calls do not prove to be actual emergencies, there seems to be real ground for complaint, so much so, in fact, that the American Medical Association has called upon county medical societies to meet the public demand for medical service at night.

In an editorial in the March 6 issue of the Journal of the American Medical Association, it is stated that from many sections of the United States, complaints have come lately that persons who have called physicians late at night have been unable to secure attendance by either those whom they considered their family physicians or from specialists or, indeed, from any physicians.

Continuing, the editorial says:

"Intemperate discussion of this subject has caused some publications to assert that a government medical service would prevent such incidents. These statements are made without knowledge of what actually occurs when government agencies take over medical practice. When the physician is placed on a nonprofessional basis, he is likely to act like other nonprofessional employees.

"Any human being who is fatigued or exhausted by long hours of work under conditions of stress and great responsibility will eventually reach a point at which response is difficult. People should understand that the physicians of the United States carried a tremendous burden during the war. The removal of one third of the medical profession from private practice placed enormous stress on those who remained at home. The young men who returned from the war have to work hard to bring themselves up-to-date and they have the same problems of housing, difficulties of securing equipment and making postwar adjustments that occur in every other occupation. These adjustments will be made gradually. Nothing is to be gained by unwarranted, acrimonious and intemperate charges of failure to meet what seem to be absolute obligations."

Whether we like it or not the medical profession is definitely on trial at the bar of public opinion and, as a matter of public relations, we should, collectively and as individuals, do everything possible to minimize criticism. Having this in mind, we urge the county medical societies in West Virginia to establish mechanisms whereby satisfactory night service may be provided in their respective communities. Not only is it a duty we owe the public, but it is also an excellent public relations policy.

THE DOCTOR'S LIFE SPAN

One of the most intriguing phases of anthropology, certainly to the writer, is the study of longevity, and the causes which influence longevity, especially those tending to lengthen the life span.

Gradually, as we collect more data, we understand better the effect of occupations upon the length of life.

As an illustration of what we may look forward to in our own callings, the findings of the Metropolitan Life Insurance Company, as reported in the Medical Times, will be interesting to all of our members:

"Metropolitan Life Insurance Company studies show that after 35 the prospective lifetime of the American physician is somewhat less than that for white persons in the general population. At age 35 the average physician has almost as many years remaining as he has already lived. At age 45, the average physician may expect to live an additional quarter-century. At 65 he may still look forward to almost 12 years of life.

"At the younger ages, 25-35, the physician has a more favorable record than the general population as regards death rates. But as the years of practice go on, the death rates of the doctors at first approach those of the general population, and toward the close of professional life rise above them. However, those physicians who survive into late life experience about the same mortality as the general population, and are presumably the hardier individuals, who may be benefiting from the advantages of an especially good heredity or a favorable environment, or both."

NATIONAL BLOOD PROGRAM

At the close of World War II the Army and Navy had on hand over 2,800,000 units of blood plasma. This plasma was returned to the American Red Cross for distribution and use of the people of this country. The distribution is being made to doctors and hospitals through state departments of health.

According to Dr. N. H. Dyer, state health commissioner, distribution started in January, 1946, and has continued since that time. The demand has increased to the point where it is now estimated that the supply will be exhausted by July 1, 1948. Since the inauguration of the program, over 12,000 units of plasma have been distributed in this state.

It is obvious that if the distribution of blood plasma is to be continued after midsummer, when the present supply will undoubtedly be exhausted, every effort must be made to expedite the functioning of the National Blood Program.

We join with Doctor Dyer, the state health commissioner, in urging each citizen to support this undertaking to the full extent of his ability, as blood cannot be manufactured and can come only from our veins. This is truly a program "of the people, for the people".

TUBERCULOSIS ABSTRACTS*

CASE-FINDING

Modern case-finding is without doubt one of the chief factors in the battle against tuberculosis. It began with emphasis upon contact examinations and extended to mass community-case-finding techniques. Now roentgen technique, particularly as exemplified by the miniature film, is in danger of crowding out other important diagnostic measures, notably tuberculin testing.

Nevertheless there are enormous difficulties in the way of procuring periodic chest films for everybody. Expense is one thing; personnel is another. Cooperation on the part of the public, while less tangible, is not to be ignored. As an experiment, total community surveys have been made and are now being undertaken by the Tuberculosis Division of the United States Public Health Service. Meanwhile it would seem that other efforts, which attempt to focus roentgen case-finding technique, should not be neglected.

Fortunately it has long been recognized that tuberculosis is distributed in more or less well-defined patterns. It is more prevalent among the underprivileged; and therefore, in groups whose housing and nutrition are bad. There is evidence that other not well understood biological factors may also play an important role in morbidity and mortality characteristics. Numerous observations suggest that these factors are extremely subtle in their action. Among these may be mentioned the fact that the Chinese of San Francisco have a death rate from tuberculosis between three and four times that of the white population, while the Japanese of the same city, in the year before World War II, had a death rate less than that of the white population. Among the white population the death rate increases in inverse ratio to economic status. Case-finding studies, therefore, yield rich returns when directed toward special population groups, with a high incidence of tuberculosis.

Recently it has been recognized that general hospitals and clinics normally operate as concentrating mechanisms for cases of tuberculosis. Less consideration has been given the offices of the general medical practitioners.

If it is recognized that clinics, general hospitals and doctors' offices represent great natural sieves for the collection of tuberculous individuals, there is present here an extremely economical method of attack.

It would seem that the general practitioners' offices are the great neglected field for case-finding and may prove to be one of the most economical and satisfactory places for further effort. The crux of the matter lies in establishing cooperation between tuberculosis associations, the Public health Services and organized medicine.

Case-Finding, Sidney J. Shipman, M.D., Editorial, The American Review of Tuberculosis, December, 1947.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Association.

General News

SECRETARIES' CONFERENCE FIRST SINCE BEGINNING OF WORLD WAR II

Over forty West Virginia doctors attended the annual Secretaries' Conference in Charleston, March 14, which was revived after having been discontinued in 1941 on account of World War II.

Secretaries and presidents from practically all of the twenty-nine component societies and several officers and members of the Council were present for the meeting.

The conference was opened with a secretaries' forum at which matters of organizational interest were discussed. A few of the secretaries present had served in that capacity for a number of years, but most of them had but recently assumed their duties. The importance of the maintenance of close contact between the headquarters office of the West Virginia State Medical Association and the office of the secretary of each society was stressed, particularly with reference to the maintenance of a current roster of members. Matters discussed included arrangement of programs for meetings and the use of local society news in The West Virginia Medical Journal. Several of the more important sections of the by laws were reviewed.

The speaking program followed the secretary's forum, with the first paper being presented by Dr. Wingate M. Johnson, of Winston-Salem, North Carolina, professor of clinical medicine at the Bowman Gray School of Medicine of Wake Forest College. His subject was "Postgraduate Education for the General Practioner."

Postgraduate Education Important

Doctor Johnson discussed the importance of continued education for the "family doctor." Such education, he said, can be obtained by reading medical journals and books, or by attending refresher or short postgraduate courses offered at many of the hospitals over the country. "While specialists make it a point to take this work frequently," he said "the average general practioner feels that it is almost an impossibility for him to leave his home commuity for this purpose."

Doctor Johnson expressed the thought that doctors generally, to keep up with the march of medicine, must read current medical literature.

Dr. L. Fernald Foster, of Bay City, Michigan, Secretary of the Michigan State Medical Society, followed Doctor Johnson on the program. He discussed "Medical Public Relations" in a straightforward manner, reporting his personal experiences as a practioner, and his observations as secretary of one of the largest medical societies in the United States.

Public Entitled to Health Education

"The public is entitled to full medical and health information," he stated, "and a balanced program, in which all communication media are used, is necessary

if we are to successfully carry the message to the public. The needs which exist in medicine should be recognized and then accurately estimated by modern surveying methods." Doctor Foster believes that an overall program must be developed to meet medical needs, with emphasis placed in proportion to the extent and intensity of the various needs.

"It is vital to remember," he stated in conclusion, "that these plans never succeed unless medical organizations and every lay organization interested in public health knows about them and supports them. To obtain this universal cooperation and support, it is obvious that the program must be based on the promise and the intent that it is to serve the public interest."

Medical Society Programs

Mr. Theodore Wiprud, of Washington, D. C., Executive Director and Secretary of the Medical Society of the District of Columbia since 1938, spoke on the subject of medical society programs. The speaker said that, in planning programs it must be remembered that most physicians are not interested in experimental medicine. "Above all," he said, "they wish to hear scientific subjects discussed from the point of view of their application in actual practice. Experienced program chairman have long since learned that research and theory must be administered to practicing physicians in small doses, and that if it is to be successfully accomplished, it must be done by physicians who are capable of presenting the subjects in a readily understandable and interesting manner."

In the opinion of the speaker, one program a year should be devoted to health legislation and medical economics. Every effort must be made to assure the attendance of as many physicians as possible. Program committees feel fortunate if well-known physicians appear on programs. "This is understandable," he said, "because their appearance arouses interest among the members of the profession." The speaker stated that it will be found in many instances that an attractive and successful program can often be developed by scheduling members of component societies for addresses at regularly scheduled meetings.

"The program committee," he said, "should learn what members of the county medical society wish to hear. It should review the programs presented in the previous year or two, so that there will be no repetition, unless it seems desirable."

Public Health Objectives

The last speaker on the program was Dr. N. H. Dyer, State Health Commissioner, whose subject was "Public Health Administration." The speaker discussed in a clear and concise manner the many services available through the state health department to component society members. He stated that the main objectives of public health administration are to promote community activities for the prevention of disease, to prolong human life, and to improve mental and physical efficiency. He believes that this is best accomplished through coordinating community effort. "Community health," he said, "is not the direct responsibility of the practicing physician, but he is and rightfully should be the key person in planning with the health department for a healthier community."

Taking note of the tremendous change in public health methods in the United States during the past four decades, the speaker stated that there will be even a further reduction in mortality and in morbidity with the availability and more general use of sulpha drugs, penicillin, and streptomycin.

President

At the noon luncheon, Dr. Thomas Bess, of Keyser, president of the West Virginia State Medical Association, was the guest speaker. He extended a welcome on behalf of the officers and members of the Council, and expressed the hope that the conference, always an annual affair in the past, could be continued without interruption in the future.

Dr. Frank J. Holroyd, of Princeton, for years secretary of the Mercer County Medical Society, served as moderator at both morning and afternoon sessions, and as toastmaster at the luncheon. The meeting got under way promptly as scheduled at 10 o'clock in the morning and adjourned that afternoon at four o'clock.

The following West Virginia doctors attended the conference:

Donald R. Roberts, Elkins; H. H. Howell, Madison; George O. Martin and M. H. Porterfield, Martinsburg; Elizabeth McFetridge, Shepherdstown; C. B. Hughes, Jr., and Wm. L. Claiborne, Montgomery; H. B. Strader, White Sulphur Springs; J. F. McCuskey, Wm. H. Allman, and J. E. Wilson, Clarksburg.

John W. Hash, Paul H. Revercomb, T. M. Barber, N. H. Dyer, and S. L. Bivens, Charleston; Thomas Bess, Keyser; George T. Evans, Idamay; Wm. A. Welton, Fairmont; David L. Ealy, Moundsville; H. L. Hegner, Wellsburg; Dante Castrodale, Welch.

Frank J. Holroyd and Daniel Hale, Princeton; Frank J. Burian and J. C. Lawson, Williamson; Clark K. Sleeth, Morgantown; J. D. Bird, Jr., and Russell B. Bailey, Wheeling; Logan W. Hovis and S. Wm. Goff, Parkersburg; M. H. Maxwell and Robert W. Love, Moorefield.

W. P. Johnson, Jr., Arthurdale; Fred Richmond and B. K. Peter, Beckley; Buford McNeer, Hinton; Paul P. Warden, Grafton; J. F. Biggart, Mullens; Harold Van Hoose, Man; J. L. Patterson, Logan.

PROPOSED AMENDMENT TO THE CONSTITUTION

The following amendments to the Constitution of the West Virginia State Medical Association, offered by Dr. V. L. Chambers of Huntington at the annual meeting of the House of Delegates at Charleston, May 12-14, 1947, will be submitted to the House of Delegates for final action at the 81st annual meeting at Huntington, May 10-12, 1948:

Article IX.

Sec. 3. Amend the section to read as follows:

"Officers of this Association shall be elected at each annual meeting of the House of Delegates, except Councillors who shall be elected by the Delegates from their respective Councillor Districts at each such annual meeting."

(This section now reads as follows: "Officers of this Association shall be elected by the House of Delegates at each annual meeting.")

PLANS ALMOST COMPLETED FOR ANNUAL MEETING AT HUNTINGTON

The scientific program for the 81st annual meeting of the West Virginia State Medical Association has been completed by the scientific work committee, and final plans are now being made for the three-day meeting which will open at Huntington on Monday, May 10.

Program speakers will include many doctors prominent in medical affairs over the country, a few of whom have appeared on previous state programs.

Doctor Thomas Bess, president of the State Medical Association, has named Dr. L. Rush Lambert, of Fairmont, as the orator in medicine, and Dr. Bert Bradford, Jr., of Charleston, as the orator in surgery.

Dr. Thomas L. Harris, of Parkersburg, president in 1945, will serve as toastmaster at the banquet on the final evening of the meeting. Dr. Irwin Stewart, president of West Virginia University, will be the guest speaker at the banquet. His subject will be, "West Virginia University and Medical Education in West Virginia."

Doctor Bess will deliver his presidential address on Monday evening, May 10, and as usual, a speaker of national prominence will appear on the Tuesday night program. The complete convention program will appear in the May issue of The Journal.

The opening day will feature papers on EENT, allergy, tuberculosis, industrial medicine, and obstetrics

Tuesday's program will include general sessions on internal medicine, with discussions such as infectious hepatitis, management of the menopause, hypertension, and pneumonia in infants.

On Wednesday, surgical topics to be discussed include cervical discs and surgery in various types of cancer.

The first session of the house of delegates is scheduled for Monday afternoon and the final session, with the election of officers, will be held on Tuesday afternoon.

Unusual interest is being shown in the annual luncheons of sections, societies, and affiliated associations. The new Academy of Ophthalmology and Otolaryngology will hold its luncheon on Monday. Luncheons will also be arranged for the West Virginia Obstetrical and Gynecological Society and the Section on Industrial Health. Luncheon meetings will be held on Tuesday by the section on pediatrics, and a joint luncheon will be arranged for the West Virginia Heart Association, the Section on Internal Medicine, and the West Virginia chapter of the American College of Physicians. On Wednesday, luncheons are scheduled for the Association of Pathologists; the Section on Surgery; orthopedists; and radiologists.

The annual dinner of the Medical College of Virginia Alumni will be held on Tuesday evening, and a dinner meeting of the West Virginia Urological Society will probably be held at the same time.

An innovation will be a series of roundtable breakfasts for the discussion of subjects such as the use of streptomycin in tuberculosis, rheumatic fever, and neuro-surgery. Prominent speakers have accepted invitations to appear at these breakfasts, which will begin promptly at 8 o'clock and end in time for the regular morning session.

Scientific exhibits will be placed in the Bridge Room at the Prichard Hotel, where all scientific sessions will be held. Arrangements have been made for the use of the ballroom and entire mezzanine at the Hotel Governor Cabell for technical exhibits. Space has been reserved for thirty-five exhibits, featuring drugs, appliances, surgical instruments, x-ray equipment and medical books. This display promises to be the most colorful ever shown at a medical meeting in West Virginia.

All Auxiliary meetings will be held at the Frederick Hotel, with the Auxiliary to the Cabell County Medical Society serving as hostess. The complete Auxiliary program will also appear in the May issue of The Journal

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INCREASE IN COMMUNICABLE DISEASES

Reports submitted to the State Health Department for the month of January, 1948, showed a decrease of 15 per cent in births, compared with January, 1947. The total of 2,677 births reported for January compares with a top figure of 4,676 in December, 1947.

In contrast to the decrease in births, infant mortality in West Virginia in January was the highest in years. According to Dr. N. H. Dyer, state health commissioner, 135 infant deaths were reported, with a death rate of 50.4 per 1,000 live births. During the corresponding period last year the rate was 40.6 per 1,000 live births.

A total of 1,319 deaths were reported for January, compared with 1,102 in January, 1947, or an increase of 10 per cent.

Morbidity reports for February show increases in some of the more communicable diseases. An even total of 1,200 cases of measles has been reported, as compared with 406 for the same period last year.

There were five cases of typhoid fever as compared with none in February, 1947. Scarlet fever cases increased from 102 last year to 136 in February, and whooping cough increased from 72 to 128 cases.

There was a decline in gonorrhea and syphilis rates, 352 cases of gonorrhea and 310 cases of syphilis being reported as against 495 and 591, respectively, in February, 1947.

1950 WHITE HOUSE CONFERENCE

Dr. N. H. Dyer, state health commissioner, and Robert Roth, director of the department of public assistance, will serve as ex officio members of the West Virginia Committee for Community Planning for Children and Youth, organized for the purpose of arranging this state's participation in the 1950 White House Conference. The committee will include representatives from practically all departments of the state government responsible for programs for children.

The White House Conference movement began early in the twentieth century and continued until the beginning of World War II. The 1950 Conference will be the first held since 1941.

KANAWHA MEDICAL GROUP SPONSORS SYMPOSIUM ON INDUSTRIAL MEDICINE

A meeting designed primarily for West Virginia doctors and nurses engaged in industrial work, sponsored by the industrial committee of the Kanawha Medical Society, will be held at the Ruffner hotel, in Charleston, April 11, 1948. Sessions will begin at 10:20 A. M. and end at 4:00 P. M. The following tentative program has been arranged:

Morning

10:20—"Chemical Injuries to the Eye" (Illustrated by colored motion Pictures—Ralph McLaughlin, M.D.
10:40—"Industrial Skin Lesions"—Hunter Boggs, M.D.
11:00—"Methods of Skin Grafting"—T. P. Mantz, M.D
11:20—"The Dangers and Pitfalls in Intravenous Medication"—Walter G. Putschar, M.D.
12:00—Recess.

Afternoon

1:30—"The Present Treatment of Wounds"—J. Huber Wagner, M.D.
2:30—"Treatment of Abdominal Injuries"—Bert Bradford, Jr., M.D
2:50—"Treatment of Urinary Bladder and Urethral Trauma"—H. M. Escue, M.D.
3:10—Panel discussion of all papers. Questions and answer period.

Dr. J. Huber Wagner the first speaker on the afternoon program, who is chairman of the ACS regional committee on Fractures and Trauma, will meet with members of the College at noon to discuss organizational matters.

NEW AMA INTERIM COMMITTEE

Dr. Elmer Hess, of Erie, Pa., has been named by Dr. Elmer L. Henderson, of Louisville, president of the Board of Trustees of the American Medical Association, as chairman of an interim committee on hospitals and medical practice. The other members of the committee are Drs. John W. Cline, San Francisco, Cal., Edwin S. Hamilton, Kenkakee, Ill., Walter G Phippen, Salem, Mass., and Walter E. Vest, Huntington, W. Va.

The committee has been appointed for the purposes of considering the question of practice of medicine by hospitals. The members will meet with appropriate committees from the American Hospital Association, the Catholic Hospital Association, and the Protestant Hospital Association, as well as with other committees from interested medical and hospital organizations. An attempt will be made to reach an equitable solution of the problem of just where medical practice ends and hospital service begins.

PROTENUM SUPPLIES PROTEIN NEEDS

Sick children present a two-fold problem in respect to growth and maintenance of body tissue: (1) repair of the damage wrought by disease, and (2) provision of the nitrogen needed for the growth processes, which persist in their demands during periods of illness. Hence, the physician may wish to prescribe large amounts of protein. Protenum is a highly palatable high protein food—low in fat. In the form of a beverage or in various recipes, Protenum will increase the protein intake without adding appreciable bulk to the diet.

For literature and professional samples of Protenum, write Mead Johnson & Co., Evansville 21, Indiana.

KANAWHA ADVISORY COMMITTEE REPORTS

In a release from Charleston dated March 16, the advisory committee to Kanawha Medical Society stated that it had determined to the complete satisfaction of its members that the practice of accepting "rebates" by ophthalmologists no longer existed in the Charleston area.

These "trade practices" were condemned by the trustees and officers of the American Medical Association in an editorial printed in the January 17 issue of the Journal of the A.M.A.

Subsequently, on March 10, the Kanawha medical advisory committee released the following statement:

> "The Kanawha Medical Society, as it has always done, condemns the practice of rebates, splitting of fees, and all other unethical practices and subscribes to the policy of the American Medical Association as outlined by the Board of Trustees of the A.M.A.
>
> "The Kanawha Medical Society plans to delay any disciplinary action against those members who have been accused of accepting rebates until legal action, now pending in the federal courts, has clarified the isues involved, in order not to prejudice the position of the physicians accused.
>
> "Furthermore, the Kanawha Medical Society welcomes any reliable information from any individual or group concerning unethical practices by its members."

The action of the American Medical Association and Kanawha Medical Society advisory committee followed a news release from Chicago reporting the institution of an action by the government against certain optical companies, in which several West Virginia ophthalmologists were named as parties defendant. In this suit, it is charged that occulists in various parts of the country have been receiving "kick-backs" from manufacturers on the sale of eye glasses.

SEMINAR IN PSYCHIATRY

The Department of Mental Hygiene and Hospitals, the American Psychiatric Association, the Medical Society of Virginia, and the U. S. Public Health Service have arranged a seminar in psychiatry, which will be held April 5-16, in Richmond.

This seminar will bring together nationally known and local authorities in the field of psychiatry. Various phases of mental disease and hospital treatment will be discussed by several doctors prominent in the field of psychiatry.

There will be no charge for attendance at the seminar, which will be open to all physicians, psychologists, and associated workers in the field of psychiatry. Copies of the program may be obtained by writing Joseph E. Barrett, M. D., Commissioner of Mental Hygiene and Hospitals, 309 North 12th Street, Richmond, Virginia.

CANCER SUNDAY

Sunday, April 25, 1948, has been designated "Cancer Sunday" by the American Cancer Society. A clip sheet containing information about cancer will be sent for reproduction to 989 religious publications throughout the country.

CABELL ELECTS NEW SECRETARY

Dr. Thomas B. Baer of Huntington, has been elected secretary of the Cabell County Medical Society to succeed Dr. Thomas L. Grove, who has moved to Williamson.

FIVE COUNTY-WIDE HEALTH COUNCILS FUNCTIONING IN WEST VIRGINIA

Four county-wide health councils have been established in West Virginia under the sponsorship of the state department of health. These councils are located at Fairmont, Clay, Martinsburg and Charleston. In addition, a community health council is functioning at Ansted under the name of "The Ansted Health Club." Another county-wide council will be in operation in McDowell county by the first of April. Each council except the one located at Clay provides voluntary service to local health departments and carries on studies of health problems throughout the county. The Clay council, functions in matters of school health only.

Five community school health councils have been established in Boone county under the direction of the public health educator attached to the county health department at Madison.

According to Dr. N. H. Dyer, state health commissioner, eight community-school negro health councils have been organized in McDowell county, and five in Mercer county.

West Virginia schools are becoming increasingly interested in health councils. During the past two years, twenty-two school health councils have been organized under the direction and supervision of the state department of education.

The health council at Fairmont is probably the oldest in the state, having been in operation for several years. Probably all of the agencies and organizations interested in the health and welfare of the people of Marion county are represented on the council.

The state health department plans to continue its efforts to organize health councils upon a county-wide or community basis. Under its program, health councils will probably be organized in each county in West Virginia. In addition, the department will continue to encourage the organization of school health councils over the state.

USNR MEDICAL DIVISIONS ORGANIZED

Naval Reserve volunteer medical divisions have been organized in Charleston, Huntington, and Wheeling, and the following commanding and executive officers appointed:

Capt. Russel Kessel (MCS), USNR, and Commander Peter A. Haley (MCR), USNR, Charleston; Capt. William M. Strange (MCR), USNR, and Commander Bruce H. Pollock (MCR), USNR, Huntington; and Capt. William M. Sheppe (MCR), USNR, and Capt. Harold G. Little (MCS), USNR, Wheeling.

According to Capt. George B. Byrd (MCR), USNR, 5th Naval district medical reserve officer, additional divisions will probably be organized in Bluefield and Parkersburg.

The new units are being established to provide groups of trained medical officers and enlisted personnel who can be called upon in case of national emergency. The goal fixed for each volunteer medical division is 390 members, including 250 hospital corpsmen, 50 nurses, 15 medical service corpsmen, and 75 medical officers.

GOLF AND TENNIS TOURNAMENTS

Dr. J. S. Klumpp and Dr. William B. MacCracken, of Huntington, have been named chairmen of the golf and tennis committees, respectively, which will have charge of tournaments during the 81st Annual Meeting of hte West Virginia State Medical Association in that city next May. The appointments were made by Dr. E. J. Humphrey, chairman of the local entertainment committee.

Entries for the golf tournament should be mailed by members immediately, with their club handicap, to Doctor Klumpp, West Virginia Building, Huntington, and entries for the tennis tournament to Doctor MacCracken at 1139 Fourth Avenue, in that city.

The golf tournament will be scheduled for Monday, Tuesday and Wednesday during the Annual Meeting, and it is probable that the tennis tournament will get under way Sunday afternoon, May 9, at the Guyan Country Club.

VA NEEDS DOCTORS

The Veterans Administration hospital at Huntington is urgently in need of doctors to serve in the medical division. Salaries range from $4,149 to $11,000 per annum, based on individual training and experience. Full information may be obtained from Mr. C. T. Schoonover, Personnel Officer, VA hospital, 1540 Spring Valley Drive, Huntington.

UNIVERSITY RECEIVES CANCER GRANT

West Virginia University, at Morgantown, has received a grant of $5,000 from funds of the National Cancer Institute of the USPHS, for cancer teaching in the School of Medicine. This grant is part of a two million dollar program to improve the teaching of cancer in professional schools. To date, grants total $1,389,573. Sixty medical schools and 17 dental schools comprise the group receiving grants.

DOCTOR GOODHAND CERTIFIED

Dr. Charles L. Goodhand of Parkersburg, has been certified as a Diplomate of the American Board of Obstetrics and Gynecology.

DR. MORRIS FISHBEIN AT MONTGOMERY

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, will be the guest speaker at an open meeting at Montgomery, May 26. The meeting which will be held in the auditorium of West Virginia Institute of Technology, is being sponsored by the Fayette County Medical Society, and an invitation has been extended to all members of the West Virginia State Medical Association to be present.

THOMAS MEMORIAL NAMES OFFICERS

Dr. R. E. Pence, of South Charleston, has been named president and chief of staff of Thomas Memorial hospital, in that city, to succeed the late Dr. J. Ross Hunter. Dr. Harry E. Baldock, of Charleston, succeeds Doctor Pence as vice president of the hospital staff, and Dr. F. C. Reel, also of Charleston, has been elected secretary.

SPEAKER LAUDS DR. EDWARD McELFRESH FOR SERVICE AS GENERAL PRACTITIONER

Dr Charles E. Holzer, of Gallipolis, Ohio, delivered the principal address at the county wide observance of the 55th anniversary of Dr. Edward V. McElfresh's practice in Mason County, held at Point Pleasant, Sunday, March 7.

The meeting was opened at 12:30 p. m. with an address of welcome by Dr. C. Leonard Brown, secretary of the Mason County Medical Society. Dr. Walter E. Vest, of Huntington, editor of the West Virginia Medical Journal, extended greetings from the West Virginia State Medical Association, personally representing Dr. Thoms Bess of Keyser, the president, who was unable to attend.

Doctor Holzer recounted his experiences in the early days of his practice in the Gallipolis and Point Pleasant communities. "I remember well," he said, "my own early days in this valley. Without capital, but with a lot of enthusiasm, I started a hospital. The doctors in the territory were helpful and kind, and I owe much to all of them. There was one doctor who was outstanding, Edward McElfresh.

"I first met Dr. McElfresh in 1910. Intuitively I recognized him as a great man. He was then, as he is now, my ideal of what a man who devotes his life to the healing art should be. He brought to his work a trained mind, sound medical knowledge, and skillful hands. Above and beyond that, he brought the kindly spirit, the sympathy and interest in his patients and their problems, the selfless devotion to his profession, the complete integrity in business and professional matters, and the generosity to others which place him among the chosen of the medical profession."

Continuing, he said, "The man who selects medicine as his life's work must make great sacrifices. The needs of his patients must come before his personal life. His family see him irregularly. His cherished plans must be laid aside at a moment's notice. It is only human to feel, at times, that this is a hardship.

"In the early days of general practice, particularly in the days when the roads were so bad that the patient could not get to the doctor, great physical endurance was necessary to carry on. It was literally a case of the mountain going to Mahomet. Night long trips to the back country, driving part way, carrying a heavy bag while walking through mud to his shoe tops. the doctor finally reached the patient. Often his only reward was the knowledge that he had been able to ease the suffering of a fellow being."

The work that Doctor McElfresh did during the great flood in the Ohio river in 1913 is well remembered by the people of Mason County. Doctor Holzer stated that Doctor McElfresh was going constantly, on horseback, rowboat and steamboat up and down the Ohio and Kanawha rivers to deliver babies and administer to people in distress.

"I remember several of these cases very well," he said, "one being a resident of Mason county. Doctor McElfresh correctly diagnosed the condition as an intestinal obstruction, and brought the patient to the Spencer hotel in a rowboat, the water being up to the second story of that building. We did the operation, and the patient recovered. Later the same day he used the same trusty rowboat to bring to the hospital a patient from Henderson, Ohio, who needed emergency surgical attention. After assisting in the surgery, Doctor McElfresh returned to the Point for other missions of mercy."

Doctor McElfresh has always been studious, and, no matter how heavy the demand upon his time, or how exhausting the work, has kept up with information concerning the newest drugs, which he uses with judgment and skill. As Doctor Holzer said, "He has seen medicine make giant strides during the course of his career, and has kept pace with the new discoveries which have done so much to alleviate suffering and prolong life."

The speakers cited two instances which are characteristic of Doctor McElfresh's innate honesty and modesty: On one occasion, he made approximately thirty visits to a woman who was desperately ill, and gave his best in time, skill and energy to relieve her suffering and save her life. Unfortunately, she died. When the husband came to pay the fee, he was presented with a bill for $16.00 which failed to cover the actual expenses incurred. The husband protested that it was too small, but Doctor McElfresh said that since he hadn't been able to do the patient any good, he did not want to charge more. On hearing of this incident, one of his colleagues said, "Well, Mac, if I made a charge for only those patients I cured, I'm afraid I couldn't make a living."

Upon another occasion, when complimented on his remarkable success in the treatment of a large series of typhoid fever cases, he replied in his unassuming way that it was the tendency of people to get well if you didn't interfere too much.

Doctor Holzer closed his address by quoting Robert Louis Stevenson's tribute to the physician:

> "There are men and classes of men that stand above the common herd: the soldier, the sailor, and the shepherd not infrequently; the artist rarely; rarelier still, the clergyman; the physician almost as a rule. He is the flower of our civilization, and when that stage of man is done with, and only to be marvelled at in history, he will be thought to have shared but little in the defects of the period, and most notably exhibited the virtues of the race. Generosity he has, such as is possible to those who practice an art and never those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are more important, Herculean cheerfulness and courage. So it is that he brings an air of cheer into the sick room, and often enough, though not so often as he wishes, brings healing."

Many substantial gifts were presented to Doctor McElfresh on behalf of the people of his home community. The meeting which was held in the State theater was attended by hundreds of his friends and acquaintances in Mason county, West Virginia, and Gallia county, Ohio.

AMERICAN PHYSIOTHERAPY ASSOCIATION

The annual conference of the American Physiotherapy Association will be held at the LaSalle hotel in Chicago, May 23-28, 1948.

NEW VA AGREEMENT FOR VETERANS CARE

The new agreement between the Veterans Administration and the West Virginia State Medical Association, providing for continued "home town" medical care for veterans, has been finally approved. The agreement, which was received March 23 at the headquarters offices of the State Medical Association, in Charleston, is effective April 1, 1948.

The fee schedule, which will supplant the one in force since April 1946, is being printed as this issue of The Journal goes to press. A copy will be mailed before April first to each of the 906 members of the Association participating in the program.

The new agreement was signed after negotiations covering a period of several months. The fee schedule, revised to include many additional items, was negotiated with Veterans Administration officials by the State Medical Association's veteran's board of review, composed of Dr. James R. Brown, of Huntington, and Dr. Claude B. Smith and Dr. Paul H. Revercomb, of Charleston.

BECKLEY DOCTOR IN CALIFORNIA

Dr. E. L. King, of Beckley, former member of the staff at Pinecrest Sanitarium, has accepted a residency in thoracic surgery at the Olive View Sanitarium, at Olive View, California. He will resume practice in West Virginia upon the completion of his residency there.

DR. G. E. GWINN WITH VA AT CLARKSBURG

Dr. George E. Gwinn, of Beckley, has accepted appointment as senior medical officer in charge of the Veteran's Administration offices in Clarksburg. He succeeds Dr. Charles G. Willis, retired.

Doctor Gwinn was appointed superintendent of Pinecrest Sanitarium at Beckley in 1944, and tendered his resignation in November, 1947. While his new duties at Clarksburg will be largely administrative, he will be in charge of a tuberculosis follow-up clinic at the VA offices in that city.

According to Dr. Leo F. Steindler, chief medical officer at the Veteran's Administration regional office at Huntington, new x-ray equipment has been installed, and a laboratory is being fully equipped. The office staff will include a fulltime dentist and a social service worker.

Doctor Willis, who is retiring after several years' service with the Veteran's Administration, has relinquished his duties, and his plans for the future are indefinite.

NATIONAL HEALTH ASSEMBLY

The first National Health Assembly has been called by Oscar R. Ewing, federal security administrator, to meet in Washington, D. C., May 1-4. Leaders in various fields have been invited to serve on the executive committee of the Assembly, which will consist of representatives of public and private organizations and agencies concerned with public health.

Dr. George F. Lull, secretary and general manager of the American Medical Association, has been invited to serve on the executive committee.

NEW EDITION OF POLIO BOOKLET

The 1948 edition of "Facts and Figures about Infantile Paralysis," a publication of the National Foundation for Infantile Paralysis, is now available to physicians and public health workers. Statistics on the disease, revised yearly, are gathered from the United States Public Health Service, state health departments, and various other sources.

Incidence of infantile paralysis in the United States is shown in tables, maps and charts. Other statistics furnish information on age and sex distribution, case rates, crippling conditions and mortality. For the first time, this publication includes data on the disease in foreign countries.

Copies of the booklet (No. 59) may be secured without charge by writing Education Service, The National Foundation for Infantile Paralysis, 120 Broadway, New York 5, N. Y.

PHC LICENSES 32 DOCTORS

The Public Health Council has licensed 32 doctors to practice medicine in West Virginia as the result of the examination held in Charleston, January 12-14, 1948.

The following doctors were licensed by direct examination:

John Albert Hedrick, Beckley; Lewis Hobart Thomas, Coalwood; Archibald Belgrade McCoy, Petersburg; Alexander Witkow, Charleston; Herman Rubin, Wheeling; and, David Earl Yoho, Moundsville.

The following is a list of the doctors licensed by reciprocity:

Albert Lanham Allen. Huntington; William James Bannen, Jr., South Charleston; Harold Paul Biehl, Richwood; Reece Richard Boone, Jr., Smithers; Edmund Bennett Conolly, Martinsburg; Cornelius Carter Davis, Jr., Clarksburg; Adam Brown Curry Ellison, Charleston.

Raymond John Fitzpatrick, Bishop, Va.; Esten Hendricks, Lillybrook; Grover Cleveland Kirk, Berkeley Springs; Melvin Eldred Lea, Philippi; John Chapman Markley, Huntington; James Bryce Medlock, Beards Fork; Gerard Lucien Morin, Kimberly; Philip Wood Oden, Oak Hill.

George Benedict Pantera, Oak Hill; David Clinton Prickett, Fairmont; Oscar Lee Ramsey, Jr., Holden; Hardin McLean Ritchey, Whitesville; Charles Weldon Trader, Elkins; Ferdinand Michael Viscuse, Martinsburg; Theodore Roosevelt Whitaker, Weirton; Arnold C. Williams, Glenalum; Fred Eugene Wise, Jr., Marmet; Marshall Wayne Woodard, Man; and John George Zekan, Brownton.

DR. BESS' ITINERARY

Dr. Thomas Bess, president of the West Virginia State Medical Association, has accepted additional speaking engagements before component societies as follows:

April 1, Wellsburg (noon), and Holidays Cove (evening): April 6, Wheeling; and May 4, Montgomery.

LIBRARY OF THE

SOCIETY WOULD PLACE ENTIRE CANCER PROGRAM UNDER ONE HEAD

Dr. Chauncey B. Wright, of Huntington, was reelected chairman of the board of directors of the West Virginia Cancer Society, Inc., at the annual meeting held March 19, at the Daniel Boone hotel, in Charleston. Other officers were reelected as follows: Vice chairman, Dr. Thomas Bess, of Keyser, president of the West Virginia State Medical Association, and, secretary, Charles Lively, executive secretary of the State Medical Association.

Board of Directors

The following were also named as members of the board of directors: Drs. H. C. Myers, Philippi; T. L. Harris, Parkersburg; H. H. Haynes, Clarksburg; Cole D. boar dof directors: Drs. H. C. Myers, Philippi; T. L. Genge, Huntington; James M. Bonnar, Fairmont; Russell B. Bailey, Wheeling; W. J. G. Putschar, Charleston; Robert J. Reed, Jr., Wheeling; R. H. Boice, Parkersburg; R. O. Rogers, Bluefield; and Elizabeth McFetridge, Shepherdstown; Mrs. D. W. Stubblefield, Charleston, and Mrs. James D. Francis, Huntington; and Messrs. James Paull, Wellsburg; Arthur B. Koontz, Charleston; Robert J. Riley, Wheeling; and Theodore McDowell, Beckley.

New directors elected include Dr. Hugh Bailey, Charleston; Dr. E. J. Van Liere, Morgantown; John B. Reynolds, Wheeling; Garland Dunn, Martinsburg; and Philip Gibson, Huntington.

Executive Committee

All of the members of the executive committee were reelected. Dr. J. Keith Pickens, of Charleston, acting director of the division of cancer control, was named to succeed Dr. Paul R. Gerhardt, who is now director of the state division of cancer control at Albany, New York. Dr. Hugh Bailey, of Charleston, was named a member to succeed Dr. J. Ross Hunter, deceased.

Dr. Russell B. Bailey, of Wheeling, and Homer Gebhardt, of Huntington, were reelected chairman and treasurer, respectively.

Memorial for Doctor Hunter

The following committee was named by Doctor Wright to arrange for a fitting memorial to the late Dr. J. Ross Hunter: Dr. Russell B. Bailey, Wheeling; Dr. Thomas Bess, Keyser; and Mrs. John Speed Harvey, Huntington. The committee is to submit a report to the executive committee at a later date.

The following resolution, submitted by Dr. Russell B. Bailey, was unanimously adopted:

"BE IT RESOLVED, That the West Virginia Cancer Society, Inc., go on record as approving the transfer to the Cancer Division of the State Health Department of matters pertaining to the treatment and care of cancer cases, including the care and treatment of the indigent and medically indigent cancer patients in this state; and

"BE IT FURTHER RESOLVED, That it is the sense of this society that the Cancer Division of the State Health Department be placed in full charge of the cancer program in West Virginia and that all sums appropriated by the legislature for cancer education and for the treatment and care of cancer patients, be disbursed by the Cancer Division of the State Health Department; and

"BE IT FURTHER RESOLVED, That copies of this resolution be mailed to Governor Clarence W. Meadows, The American Cancer Society, the state health commissioner, the director of the department of public assistance, the acting director of the division of cancer control, the president and chairman of the Council of the West Virginia State Medical Association, the President of the Senate of West Virginia and the Speaker of the House of Delegates, and majority and minority leaders in both branches of the legislature."

RELOCATIONS

Dr. Richard N. O'Dell, formerly of Belle, who has been taking postgraduate training toward the requirements of the American Board of Internal Medicine at the University Hospital, in Syracuse, New York, and who has been serving as instructor in the department of medicine at Syracuse University College of Medicine, will complete his work there July 1, 1948. He will locate in Charleston for the practice of his specialty of internal medicine.

* * * *

Dr. Seymour W. Meyer, formerly of Elkins, is now located in Brooklyn, New York, where he has offices at 163 Eastern Parkway. Doctor Meyer is associate attending surgeon at St. John's Hospital and assistant attending surgeon at Beth-El and Cumberland Hospitals. He is also serving as director of intern-resident education at these two hospitals.

* * * *

Dr. Wendell E. James formerly of Elkins, is now a member of the staff at the Laconia Hospital, Laconia, New Hampshire.

* * * *

Dr. Thomas L. Grove, of Huntington, secretary of the Cabell County Medical Society, has moved to Williamson, where he will continue the practice of his specialty of radiology, with offices at the Williamson Memorial Hospital.

* * * *

Dr. David W. Palmer, formerly of Wheeling, who has been serving a residency in urology at St. Vincent's Hospital, Erie, Pennsylvania, for the past two years, has moved to Columbus, Ohio, where he will engage in the practice of his specialty. He has offices at 1166 Grandview Avenue, Columbus.

* * * *

Dr. David A. Watkins, of Buckhannon, who has been on the staff at the Veterans Administration Regional Office in Huntington, has moved to Clarksburg, and will continue as a member of the VA medical staff in that city.

* * * *

Dr. John L. Feldman, formerly of Longacre, who has completed his hospital training in New York City, has moved to Quincy, Illinois, where he is a member of the staff of the Quincy Clinic, at 1416 Maine Street, in that city.

ANXIETY AND TEMPERATURE

One of the more infrequent manifestations of anxiety is a moderately elevated temperature, which is often undiagnosed and is usually the cause of prolonged and exhaustive clinical research and fruitless laboratory examinations. This is in marked contrast to the lack of respect with which most well oriented physicians treat similar elevations in pulse, respiration and blood pressure, which are also frequently found to be manifestations of anxiety. The "iatrogenic" factor in this particular condition, which I believe may become recognized as a well-defined clinical entity, is of paramount importance, since the doctor's concern may easily become the patient's worry.—Rocky Mountain Medical Journal.

"...pressure of the gravid uterus mechanically interferes..."

in pregnancy

"Constipation is the rule. The pressure of the gravid uterus mechanically interferes with the function of the small intestine and colon per se and also renders the act of defecation less efficient by its effect on the diaphragm, abdominal muscles and levator ani."

—*Bockus, H. L.: Gastro-Enterology, Philadelphia, W. B. Saunders Company, 1946, vol. 3, p. 999.*

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Unfortunately, nothing is missed until it is lost. This applies a hundred fold to health. Up to the time it goes or is seriously threatened, it is taken for granted. Physicians usually go a step further and actively kick their well-being around until they knock it out.

Civilization with its necessary rules and conventions make the environment of laymen difficult enough. In addition to the ordinary problems of civilized life, and tribulations peculiar to himself. Even if the simple, common sense rules of healthy living were observed the road would be hard. When they are completely ignored, successful passage becomes almost impossible.

From the time the potential medico enters college, the sensible, sane mode of life is forsaken. Regular hours, meals, rest, exercise go out the window. In their place come worry, anxiety, long physical strain, unnecessary competition, too many cigarettes and too much coffee. The road becomes increasingly more difficult to travel and with middle life when the going should level off, it is at its toughest.

The ulcers wane and excerbate and if the physician successfully survives his gastrectomy he comes under the terror reign of his coronary arteries. These small but vital structures constrict and dilate depending on the physical or mental tension at the moment. They give many benign warnings which are usually answered with increasing, hurried doses of sodium bicarbonate. The day finally comes, however, when they rebel and lay their owner low. It, too often, takes a collapse to teach the physician the meaning of the word, relax. This is too bad because the Florida sunshine is more enjoyable a. c. than p. c. (post coronary) and besides it is prophylactic.

Patients are instructed, at great length, the value of relaxation by physicians who act in their own lives as if they didn't know the meaning of the word. The very nature of a doctor's business makes frequent vacations imperative if normal physiology is to be maintained. Vacations, besides giving opportunity for needed rest, would afford the busy practitioner a chance to learn a little about things not medical. This would make for better doctors and certainly healthier ones. In these days of high taxes when one works most of the

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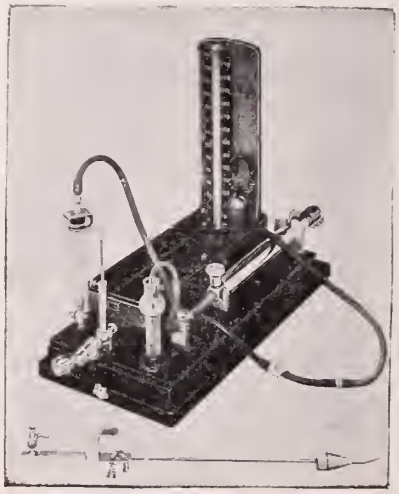

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time for the government one should be permitted a vacation at Uncle Sam's expense.—E. A. G. in Bulletin, Medical Society of the County of Kings (N. Y.).

PEDIATRICIANS FOR ADULTS

A medical educator expressed a need by saying, "What we should have is a pediatrician for adults." The same thought was implied in a newspaper carrying a headline on "aged orphans." The present resurgence of interest in the general practice of medicine reflects the same thought. In other words, the disappearance of the old family physician is being felt.

Viewed not economically but basically, individuals and families need a health and welfare counselor. In the few areas where he is located and for the small per cent of families that he reaches, the pediatrician serves as such a counselor. He not only takes care of the sick, but he guides the health of the well, he does preventive work, he counsels on the mental and emotional development, and he advises the family on medical aid and consultants. But only the large centers have pediatricians and in these areas pediatricians serve only a part of even the childhood population—thus the comment on the need of a pediatrician for adults.—H. E. Thelander, M. D., in California Medicine.

VOCATIONAL NURSES

A recent survey by the American College of Surgeons indicated that 82 per cent of more than a thousand hospitals were already utilizing adjunct nursing personnel, whereas 60 per cent favored the establishment of training facilities for nurses' aides within their own walls. The time when nursing services within a hospital could be provided by merely opening a school appears to have gone. Gone too are the emotional stimuli that brought competent men and women to the hospital bedsides of the Nation during wartime. From now on it seems to be a matter of supply and demand—the supply being admittedly short, and the demand inflated by easy money and Blue Cross contracts.—New England Joprnal of Medicine.

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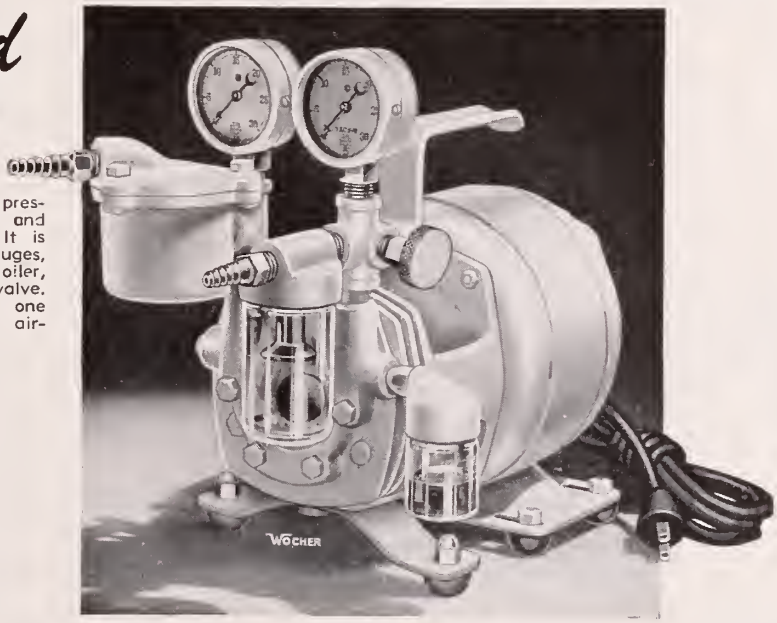

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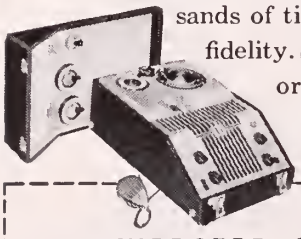

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Book Reviews

PHARMACOLOGY, THERAPEUTICS AND PRESCRIPTION WRITING—By Walter Arthur Bastedo, Ph. G., Ph. M. (Hon.), and M. D., Sc. D. (Hon.), F.A.C.P., Consulting Physician, St. Luke's Hospital, N. Y. Fifth Edition. Pp. 840, with 82 illustrations. Philadelphia and London: W. B. Saunders Company, 1947. Price $8.50.

Any busy physician needs an authentic and up-to-date text of pharmacology. In this book we have a wealth of concise, yet comprehensive, information concerning time honored drugs, as well as the newer ones. Unfortunately, many unsound claims are made for new products by some of the sales representatives of drug concerns. For example, contrast some claims you have heard for folic acid in the common anemias with the following quotations from the text regarding folic acid: ". . . It has been established as a successful treatment for the macroytic anemias of malnutrition, pregnancy, pellagra, sprue and the megaloblastic anemia of infants. In pernicious anemia . . . it fails to check the neurological manifestations. It has been ineffective in aplastic anemia, iron deficiency anemia and anemias associated with leukemia and septic infections."

Regarding drugs of controversial value, the author has tactfully recorded the claims while indicating the merits are not yet proven. For example, in the discussion of amino acids, he states: "The indication for amino acids is severe hypoproteinemia but only in conditions in which the feeding of proteins is impossible, inadequate or undesirable. There is no evidence that the amino acid digestates (hydrolysates) are at present superior to food (Peters, 1945) . . . Co Tui (1945) proposed the use of oral amino acids for the treatment of all severe ulcers. But that in ulcer treatment the hydrolysates are better than milk and egg feedings has not been clearly demonstrated."

In addition, comparative values of the use of important drugs are well presented, for example, as between morphine and demerol. Toxic reactions, dosages, contraindications, absorption and excretion are well covered. Often there is excellent correlation with physiology. However, it is evidently not the purpose of this book to be a detailed reference volume.

The author rightfully claims that his "guide throughout has been the need of the physician who employs drugs in the treatment of sick patients." For review, study and practical reference purposes, this book is recommended for general practitioners and internists.—P. A. Tuckwiller, M. D.

UNHAPPY DISPOSITION

The baby cried all day and he cried all night. He broke off to take a gulp of refreshment and began again with renewed enthusiasm. He had no pyrexia and no abnormal physical signs. All were baffled. The oldest tricks of the ward sister and the newest tricks of the H. P. were of no avail; he bellowed. The Pundit was called in. He examined the bawling brat from head to toe. When all was over there was a heavy silence. "Well, sir?" inquired the H. P., oozing deference from every pore. "I think," said the Pundit, "that child has an unhappy disposition."—The Lancet.

Obituaries

LEONIDAS WILLIAM COBUN, M. D.

Dr. Leonidas William Cobun, 78, of Morgantown, died February 20, 1948, at his home in that city. Death followed a cerebral hemorrhage suffered a few weeks previously.

Doctor Cobun was born at Masontown, West Virginia, and after completing high school and normal school work, enrolled at the Baltimore Medical College, from which he received his M. D. degree in 1898. That same year, he was licensed to practice in West Virginia and located at Masontown, moving shortly thereafter to Morgantown where he practiced continuously until a short time ago.

He was a past president of his local society, and at the time of his death was an honorary lifetime member of the Monongalia County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

He is survived by his widow and one son, William Cobun, of Morgantown.

* * * *

IRA CLAY HICKS, M. D.

Dr. Ira Clay Hicks, 79, of Huntington, died in a hospital in that city March 22. Death resulted from multiple injuries sustained in a fall at his home early in March.

Doctor Hicks was born June 29, 1868, at Winfield. He received his academic training in the public schools and at Marshall College. After serving as a teacher in public schools in Kanawha and Putnam counties, he enrolled at the College of Physicians and Surgeons at Baltimore, from which he received his M. D. degree in 1895.

He practiced at Hurricane for a few years and moved to Huntington in 1907.

Doctor Hicks had served as assessor of Putnam county and was formerly a member of the Senate of West Virginia from his district. He was an honorary member of the Kanawha Medical Society, the West Virginia State Medical Association, and the American Medical Association.

* * * *

LONZO O. ROSE, M. D.

Dr. Lonzo O. Rose, 70, of Parkersburg, died in Cincinnati, February 23, 1948, following a long illness.

Doctor Rose was born at Spanishburg, West Virginia, and received his academic training at Athens Normal School. He graduated from the College of Physicians and Surgeons, Baltimore, in 1901, and was licensed to practice in West Virginia that same year.

He was a member of the staff at a hospital in Hinton for a short time and then moved to Parkersburg, where he remained in practice for over forty years. He

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MEDICINE—Intensive Course, Two Weeks, Starting April 26.
Personal Course in Gastroscopy, Two Weeks, Starting June 28, July 12. Electrocardiography & Heart Disease, Four Weeks, Starting May 3. Hematology, One Week, Starting May 10. Gastroenterology, Two Weeks, Starting May 24.
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specialized in diseases of the stomach and radiology. He was chemist and bacteriologist for the City of Parkersburg for ten years. He had served as president of the Academy of Medicine of Parkersburg and as Councillor of the State Medical Association.

In 1943, Doctor Rose was elected to honorary lifetime membership in his local society, the West Virginia State Medical Association, and the American Medical Association. Besides his widow, he is survived by a daughter, Mrs. Katherine Bauers, of Cincinnati; three brothers, Dr. E. E. Rose, of Huntington, John Rose of Beckley, and Charles Rose, of Stewart Draft, Virginia; and a sister, Mrs. Hattie Vanzant, of Huntington.

* * * *

CHARLES WHITALL ROOT, M. D.

Dr. Charles Whitall Root, 79, of Ravenswood, died at his home in that city February 25, 1948.

Doctor Root received his M. D. degree from the University of Michigan Medical School, Ann Arbor, in 1893, and engaged in general practice at Copper Mines, Michigan. After remaining there for a year, he moved to Milwaukee, Wisconsin, where he practiced his specialty of EENT for two years. He was licensed to practice in West Virginia in 1897, and located in Charleston. Subsequently, he accepted appointment on the medical staff of the Westinghouse Electric & Manufacturing Company, and was located in Pittsburgh until 1937, when he retired.

Doctor Root is survived by his widow, Lucy (Spencer) Root, and two sisters, Mrs. T. J. Harten, of Brooklyn, New York, and Miss Alice Root, Ann Arbor, Mich.

WILLIAM B. SCHERR, M. D.

Dr. William B. Scherr, 54, of Morgantown, died March 21, 1948, in the United States Naval Hospital at Bethesda, Maryland, following a long illness.

Doctor Scherr was born at Eglan, West Virginia, and received his academic training at West Virginia University, and his M. D. degree in 1920 from the University of Cincinnati, being licensed to practice in West Virginia the following year.

Doctor Scherr served in the United States Navy during World War II, being assigned to the USS Ticonderoga. He was released from the service in February, 1946, with the rank of Captain (MC) USNR.

He had served as president and secretary of his local medical society, and at the time of his death was an honorary lifetime member of the Monongalia County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

He is survived by his widow, Beulah (Davis) Scherr, and two daughters, Mrs. Richard Bell, of Washington, D. C., and Miss Barbara Scherr, of Morgantown. Funeral services were held in Washington, Monday, March 22, with interment in Arlington National Cemetery.

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County Society News

B-R-T

Dr. Thomas Bess, president of the West Virginia State Medical Association, was the guest speaker at the regular monthly meeting of Barbour-Randolph-Tucker Medical Society, held March 11, at the Main Street Restaurant, in Parsons.

The speaker discussed the need for additional appropriations for medical care and hospitalization for the indigents. He urged the establishment of a four-year school of medicine at West Virginia University, and advocated a more liberal use of funds by the workman's compensation commission for medical care.

Doctor Bess praised Dr. N. H. Dyer, state health commissioner, for the very fine work he is doing and urged that a state health organization entirely separated from politics be set up to assure the future of public health in West Virginia. He cited the loss to the state of the services of Dr. Paul R. Gerhardt, who recently moved to New York to accept apointment as director of the division of cancer control of the state health department in that state. Lack of sufficient appropriations to provide for adequate compensation for public health workers has resulted in the loss of several key division and bureau heads in the state health department.

The speaker urged the members of the society to supplant quarterly meetings with meetings to be held regularly each month.

Following Doctor Bess' address, the president appointed Drs. C. L. Leonard, Melvin E. Lea and C .E. Johnson members of a committee to investigate and report beack concerning the advisability of arranging medical meetings monthly instead of quarterly.

The society voted unanimously in favor of the plan submitted by the Marion County Society concerning the handling of compensation funds. The members also voted unanimously in favor of a four-year medical and dental school for West Virginia University.

Dr. Melvin Lea, of Philippi, was elected a member of the Society.

The local society dues for 1949 were fixed for $4.00 per member, instead of $2.00.

DONALD R. ROBERTS, M. D.,
Secretary.

* * * *

CABELL

Dr. Kenneth L. Abbott, neurosurgeon of Columbus, Ohio, was the guest speaker at the regular monthly meeting of the Cabell County Medical Society, held March 11, at the Hotel Prichard. His subject was "Head Injuries."

T. B. BAER, M. D.,
Secretary.

* * * *

FAYETTE

Dr. Henry M. Escue, of Charleston, chief of the urological service at the Herbert J. Thomas Memorial Hospital in South Charleston, discussed urological problems at the regular monthly meeting of the Fay-

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KARL J. MYERS, M. D.

Clinical Pathology:
E. E. MYERS, M. D.

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LEWELL S. KING, M. D.

Gynecology and Obstetrics:
EDNA MYERS JEFFREYS, M. D.

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Internal Medicine:
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Resident Staff:
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PHILIPPI, WEST VIRGINIA

DIAGNOSTIC AND THERAPEUTIC FACILITIES AT THE DISPOSAL OF ALL QUALIFIED PHYSICIANS

ette County Medical Society, held at Oak Hill, March 2.

The speaker emphasized the significance of hematuria, stating that most hematuria was intermittent in character and that 60 per cent was caused by the triad of new growing calculi and tuberculosis. He said that every case of hematuria should have a complete urological survey. Among other urological problems discussed were urinary tract infections and pyelitis of pregnancy. Several therapeutic measures were outlined.

Doctor Escue's paper was discussed by Drs. William L. Claiborne and Peter Ladewig.

At the business meeting following the scientific program, the following doctors were elected to membership in the society: David Clinton Prickett, James Bryce Medlock, and Reece Richard Boone, Jr.

Dr. W. L. Claiborne, the president, presided at the meeting, which was attended by 17 members and two guests.

C. B. HUGHES, JR., M. D.,
Secretary.

* * * *

FORT HENRY ACADEMY OF MEDICINE

Dr. Joseph S. Barr, Professor of Orthopedic Surgery at Harvard Medical School, Boston, was the guest speaker at a meeting of the Fort Henry Academy of Medicine, held January 30, at Wheeling. His subject was, "The Operative Management of Low Back Pain."

Doctor Barr reviewed the subject of operative treatment for the various conditions giving rise to low back pain, and was specific in discussing when and when not to operate for this condition. Discussion, in which several members and visiting doctors participated, was led by Drs. H. G. Weiler and C. B. Buffington, of Wheeling.

Dr. Harold E. Clark, associate professor of surgery at Columbia University and Post-Graduate Hospital, New York City, was the guest speaker at the meeting of the Fort Henry Academy of Medicine, held at Wheeling, February 24. His subject was, "Management of Malignancies of the Colon." Discussion was led by Dr. Edward M. Phillips and Dr. C. D. Hershey, of Wheeling.

D. E. GREENELTCH, M. D.,
Secretary-Treasurer.

* * * *

KANAWHA

Dr. Thomas Bess, of Keyser, president of the West Virginia State Medical Association, was the guest speaker at the regular monthly meeting of Kanawha Medical Society, held at the Daniel Boone Hotel in Charleston, March 9.

Doctor Bess discussed various matters of interest to the profession in West Virginia, laying special stress upon the importance of establishing a four-year school of medicine to supplant the present two-year school at West Virginia University.

It was reported that the radio programs sponsored

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by the society and arranged by a committee with Dr. Howard A. Swart, as chairman, have been broadcast regularly during the past several weeks. Members of the society have discussed subjects of general interest to the public.

The following doctors were elected to membership in the society: Horatio Adolph Spector, Charleston; Alexander Witkow, State Health Department, Charleston; Quentin James Legg, Charleston; and Rodgers Winters Harshbarger, St. Albans.

The society voted to dispense with the monthly meeting in May on account of the 81st annual meeting of the West Virginia State Medical Association scheduled for Huntington, May 10-12.

JOHN W. HASH, M. D.,
Secretary.

* * * *

LOGAN

Dr. John E. Stone, of Huntington, was the guest speaker at the regular monthly meeting of the Logan County Medical Society, held February 11, in the club rooms at the Aracoma hotel in Logan.

Doctor Stone's subject was "Amebiasis." He reviewed material collected from a series of cases seen by him while in the military service. He spoke in detail concerning clinical findings, symptomatology and laboratory diagnosis, and described modern methods of treatment.

I. M. KRUGER, M. D.,
Secretary.

MARION

At the regular monthly meeting of the Marion County Medical Society, held February 24, at the Hotel Fairmont, in Fairmont, the following resolution was unanimously adopted:

"WHEREAS, the general fund of the West Virginia State Compensation Commission now shows an excess of over five million dollars; and,

"WHEREAS, a recent news release indicates that the State Compensation Commission contemplates reducing the premium to the industrial subscribers to the Compensation fund; and,

"WHEREAS, hospital, medical, surgical, and other fees have long been out of proportion to other existing fees and increased prices; and,

"WHEREAS, the weekly payment to those claimants who are incapacitated for regular work is absurdly small to provide any adequate standard of living during disability:

"THEREFORE, BE IT RESOLVED: That the Marion County Medical Society urges a revision upwards of fees and compensation payments to claimants in lieu of a decrease in insurance premium; and be it further

"RESOLVED, That a copy of this resolution be forwarded to the office of the State Compensation Commissioner and to the Fee Schedule and Legislative Committees of the West Virginia State Medical Association, and to each component Medical Society."

Dr. A. G. Evans, who recently accepted appointment

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as county health officer for Marion County, was a guest at the meeting.

GEORGE T. EVANS, M. D.,
Secretary.

* * * *

MERCER

Dr. Thomas Bess, president of the West Virginia State Medical Association, paid his official visit to the Mercer County Medical Society, February 19, and was guest speaker at a dinner meeting that evening at the Pinnacle restaurant in Bluefield.

Doctor Bess discussed public health in West Virginia, with particular reference to problems of rural health, veterans care and medical and hospital care for the medically indigent. He also discussed in detail the advisability of establishing a four-year medical school in this state.

Resolutions of respect to the memory of the late Dr. G. L. Todd, presented by Drs. A. C. Van Reenan, Charles St. Clair, and Ben Bird, were unanimously adopted.

FRANK J. HOLROYD, M. D.,
Secretary.

* * * *

McDOWELL

Dr. Thomas Bess, president of the West Virginia State Medical Association, was the guest speaker at the meeting of the McDowell county medical society, held at Welch, February 11. He discussed matters of interest to the profession generally, urging consideration of the proposed plan for the establishment of a four-year school of medicine in this state.

The following doctors were elected to membership at the meeting: Kenneth R. Ockerman, Kimball, and R. Moore Dodrill and Richard O. Gale, Welch.

The American Academy of Pediatrics' film, "The Problem Child," was presented by the McDowell County Medical Society at a public showing preceding the regular business meeting, held at Welch, March 10. The film was interesting and instructive, and in it many phases for the proper treatment of children were fully covered.

DANTE CASTRODALE, M. D.,
Secretary.

* * * *

OHIO

At the regular monthly meeting of the Ohio County Medical Society, held March 2, at Wheeling, the following members were elected to the House of Delegates of the West Virginia State Medical Association: Delegates, Carroll Boggs, Paul V. Graham, D. E. Greeneltch, and George Vieweg; alternates, N. K. Joseph, Wilda Joseph, R. U. Drinkard, and H. G. Weiler.

Dr. E. S. Bippus, of Wheeling, was elected to honorary lifetime membership in the society.

The society adopted a resolution, urging a revision upwards of fees and compensation payments by the

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* * * *

RALEIGH

Dr. A. C. Chandler, of Charleston, was the guest speaker at the regular monthly meeting of the Raleigh County Medical Society, held Feb. 19, at Beckley. Doctor Chandler's subject was, "Practical Ophthalmology for the Practitioner."

FRED RICHMOND, M. D.,
Secretary.

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* * * *

POTOMAC VALLEY

Dr. Thomas Bess, president of the West Virginia State Medical Association, was the guest speaker at the regular monthly meeting of the Potomac Valley Medical Society, held March 10, at the Old Homestead hotel in Burlington. The speaker discussed particularly the need for improvement in medical care for rural areas. He also discussed the problems of care for veterans and the medically indigent, and he advocated the establishment of a four-year medical school in West Virginia.

M. H. MAXWELL, M. D.,
Secretary.

Woman's Auxiliary

24th ANNUAL MEETING

Mrs. Olin Sanford Cofer, president of the Woman's Auxiliary to the Southern Medical Association, will be the guest speaker at a luncheon sponsored by the Woman's Auxiliary to the State Medical Association, which will be held Tuesday, May 11, in the Fireside Room, at the Frederick Hotel, in Huntington.

The luncheon is being arranged in connection with the 24th annual meeting of the Auxiliary, which will be held conjointly with the West Virginia State Medical Association, May 10-12, at Huntington.

At the Wednesday luncheon, which will also be held at the Frederick, Mrs. Eustace A. Allen, president of the Woman's Auxiliary of the American Medical Association, will be the guest speaker.

Mrs. W. E. Hoffman, of Charleston, who will be installed as president of the Auxiliary at this meeting, will be the guest of honor along with the presidents and presidents elect of auxiliaries from neighboring states.

All meetings of the Auxiliary, which will be held at the Frederick, will be open to the wives of all doctors attending the annual meeting.

The program for the meeting, which will be re-

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leased in April by Mrs. F. Carl Chandler, of Bridgeport, the state president, has been completed. The executive board dinner will be held in the Crystal Room at the Frederick, Monday evening, May 10, and the principal address will be delivered by Dr. Thomas Bess, president of the State Medical Association.

Mrs. Edwin J. Humphrey, of Huntington, is chairman of the convention committee which is making all local arrangements for the meeting.

* * * *

CABELL

"Doctor's Day" was observed by the Woman's Auxiliary to the Cabell County Medical Society at the Prichard Hotel in Huntington, March 12. The joint affair followed the regular monthly meeting of the Cabell County Medical Society and a short business meeting of the Auxiliary. Hostesses for the occasion were Mesdames Gilbert Ratcliff, W. E. Neal, J. C. Ford, Tom Folsom, and Lawrence Gang.

The committees for the annual meeting at Huntington, May 10-12, were announced by the convention chairman, Mrs. Edwin J. Humphrey.

During the past month, sixty underprivileged children living in Huntington were guests of the Auxiliary at the showing of an approved movie. Mrs. Albert Esposito and Mrs. E. B. Gerlach were in charge of the project.

MRS. GATES J. WAYBURN,
Editorial Chairman.

HARRISON

The annual "Doctors' Day" dinner meeting of the Woman's Auxiliary to the Harrison County Medical Society was held at the Stonewall Jackson hotel, in Clarksburg, March 4, with over eighty doctors and members of the Auxiliary present. Mrs. James Repass, the president, presided as chairman.

No business was transacted at the meeting, which is an annual social affair. Mrs. F. Carl Chandler of Bridgeport, the state president, delivered the address of welcome, and the Kelly Miller high school choir, under the direction of Mercedes Forte, presented a musical program. Door prizes were awarded to Mrs. R. T. Humphries and Dr. Carl F. Fisher.

MRS. JOHN T. GOCKE,
Secretary.

* * * *

PARKERSBURG ACADEMY

Representatives of local health agencies were guest speakers at the regular monthly meeting of the Woman's Auxiliary to the Academy of Medicine of Parkersburg, held February 10, at the Chancellor hotel, in Parkersburg. An overall picture of the public health program in Parkersburg and Wood County was presented during the afternoon.

Mrs. M. A. Santer and Mrs. James L. Wade served as hostesses at the meeting, and Mrs. Charles L. Goodhand the president, presided.

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The meeting was attended by 34 members and guests.

Dr. Fred J. Potter, of Parkersburg, was the guest speaker at the regular monthly meeting of the Auxiliary to the Parkersburg Academy of Medicine, held March 16, at the Chancellor hotel, in Parkersburg. His subject was "Cancer Treatment by Radium Therapy."

Mrs. E. C. Hartman and Mrs. R. H. Paden were hostesses, and Mrs. C. L. Goodhand presided at the meeting which was attended by 31 members of the Auxiliary.

MRS. ATHEY R. LUTZ,
Corresponding Secretary.

* * * *

RALEIGH

Mrs. John E. McKenzie, of Beckley, was the guest speaker at the regular luncheon meeting of the Woman's Auxiliary to the Raleigh County Medical Society, held February 16, at the Beckley hotel, in Beckley. She discussed most interestingly a tour through Alaska and Mexico, with her Husband, during 1947. She used colored slides in connection with her address.

A musical program was presented by Mrs. A. H. Wilson, who was accompanied on the piano by Mrs. B. K. Peter.

Mrs. W. C. Covey, the president, presided at the meeting, which was attended by twenty members. Mrs. Sam I. Sato, of Slab Fork, a new member, was presented at the meeting.

MRS. FRED RICHMOND,
Secretary.

DIABETES ABSTRACTS*

Roberts, Joseph T. and Yater, Wallace M.: Comparison of the clinical use of protamine zinc insulin and globin insulin in equal doses: Ann. Int. Med., 1947. xxx. 41-66.

The authors analyzed results obtained in the use of protamine zinc and globin insulin in 97 hospital admissions at the Gallinger Municipal Hospital, Washington, D C. In 65, globin insulin was the most effective; in 25, protamine zinc gave the best results; in 7, there was no appreciable difference. Criteria for satisfactory control were (1) excretion of less than five grams of dextrose a day and (2) blood sugar levels below 175 mg. per cent in each of seven daily determinations. These were made before each meal, one hour after each meal and at 11:00 P.M. In older diabetics, control was considered good if the blood dextrose was not above 200 mg. per cent and hypoglycemia did not occur.

The figures were analyzed statistically and the factor of chance variations was not considered to alter the conclusions appreciably.

Contrary to statements made by some workers, Roberts and Yater found that globin insulin gave better

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*The opinions expressed in these abstracts do not necessarily reflect the views of the members of the Diabetes Committee of the West Virginia State Medical Association.

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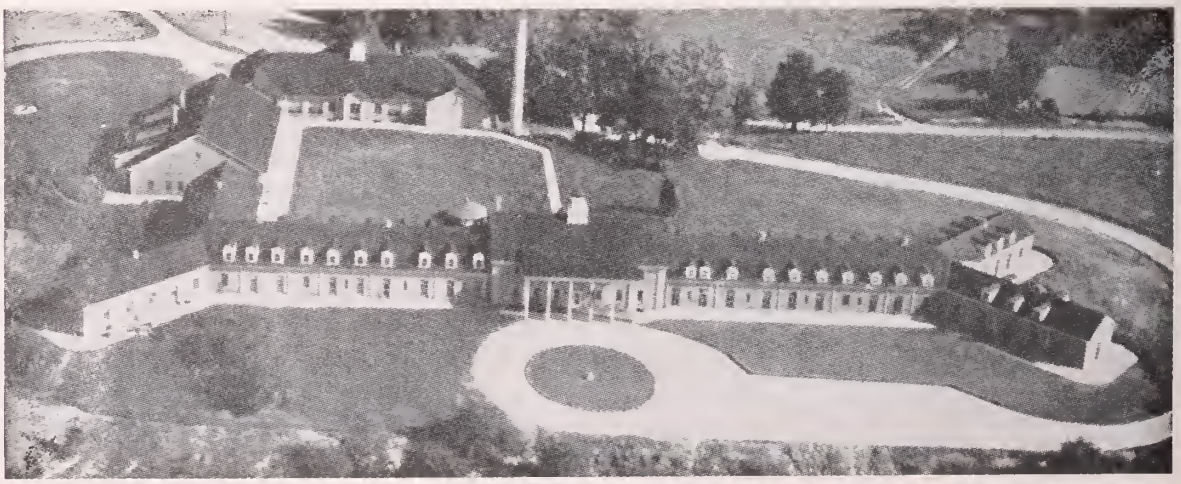

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control than protamine zinc insulin when large doses are required and cited cases requiring 70, 75 and 80 units daily. Furthermore, they found that globin insulin was just as effective as p.z. insulin in controlling the blood sugar during the night, before breakfast and during the morning after breakfast.

Insulin reactions were recorded as (1) systemic, (2) chemical (when the blood sugar level was 70 mg. per cent and under), and (3) local. There were practically equal numbers of chemical and local reactions. Protamine zinc insulin produced five systemic reactions in the group, whereas globin insulin produced only one. Local reactions were insignificant.

They conclude that both forms of slowly acting insulin are satisfactory in a large percentage of patients with diabetes. Some cases respond better to one form than the other, but in their series globin insulin was the more satisfactory in approximately two thirds of the cases. Reference was made to the practice of using mixtures of chrystalline and p.z. insulin in 2 to 1 and 3 to 1 ratios. It was thought that this was unsatisfactory for any but the most intelligent and conscientious patients.

Best results in those patients in whom the diabetic state was unusually labile were achieved by administering two doses of globin insulin daily. Approximately 70 per cent of the needed dose was given before breakfast, the remaining dose of about 30 per cent at 3:00 p.m.

Finally, the writers believe that the afternoon reactions which may occur with globin insulin are less troublesome than the p.z. insulin nocturnal hypoglycemic episodes.—D.C.A.

REMEDY FOR DOCTOR SHORTAGE

More physicians are needed in rural areas, but the truth of the matter is the medical graduate of today is unfitted to practice in small towns and rural districts as he is dependent on consultative services and on the help of laboratory technicians and other experts.

Here is a remedy: in addition to the year of internship, the medical graduate should practice, as an associate, with an established doctor, in a small town or rural community. In this way, he would gain, as under the old apprentice system, an understanding of his patients and experience in bedside practice that would be invaluable to him the rest of his life. It may be that after this, he should come back to take the state board examination, and the examination should include questions on that experience. It is likely that many of these men would stay in the communities which they had served for a year, and no physicians should be permitted to specialize until he has experienced five years of general practice.—Thomas Pitts, M. D., in J. South Carolina Medical Association.

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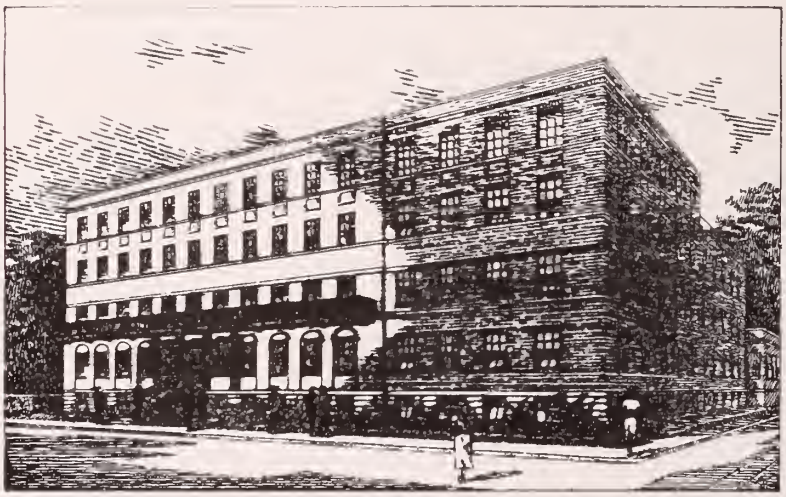

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VOL. XLIV MAY, 1948 No. 5

VENOUS THROMBOSIS OF THE LOWER EXTREMITIES WITH PARTICULAR REFERENCE TO TREATMENT*

By JOHN D. GERMAN, M. D., F.A.C.S.,
Huntington, W. Vo.

Thrombosis of the veins of the lower extremities presents itself in various forms, but fundamentally it is a single process in which so-called "phlebothrombosis" and "thrombophlebitis" represent two characteristic stages. It is well established that most pulmonary emboli arise in the deep veins of the legs. Childbirth, surgical procedures, serious illnesses and trauma frequently are complicated by thrombus formation, but it may occur also in ambulatory individuals leading a normal life. It is particularly prone to develop after local injury to the feet or legs, and is quite common after fractures of bones of the lower extremities. The age of the patient is important, since the incidence of venous thrombosis and the liability to pulmonary embolus are greater after the age of 50. Allen of Boston states that the age of the patient appears to be the single most important consideration regarding frequency and seriousness of thrombosis of the leg veins. In his series of cases only 5.7 per cent were under age 30, 12 per cent were between ages 30 and 40, 18.5 per cent were between ages 40 and 50, and 25.3 per cent were between ages 50 and 60. Thus 82.4 per cent were beyond the age of 40.

PATHOGENESIS

The pathogenesis of thrombus formation in the veins of the lower limbs is obscure. Homans states that changes in the wall of the veins of the foot and leg related to variations in venous pressure are likely to be the inciting factors in thrombus formation. Allen believes that stasis in the leg veins, dependent on bed rest and muscular inactivity, is the chief underlying basic principle in the establishment of thrombosis. The process occasionally begins in the pelvis in the prostatic, uterine, or rectal veins and in connection with local infection. As a rule, however, infection can be excluded as a significant influence. Murray of Toronto states that in only 0.5 per cent of cases of venous thrombosis was infection a factor in production of the thrombus. It is generally agreed that no matter what the inciting cause the thrombus begins at one point and is propagated from there toward the heart. Pathologically, the clot in thrombophlebitis is a white thrombus and is firmly attached to the vein wall and usually will not become detached. Such a clot is not likely to produce emboli except in rare instances when the clot liquifies due to suppuration and small infected emboli break off. On the other hand, in phlebothrombosis the clot is a red, or coagulation, thrombus and is not firmly attached to the vein wall. Thus, the patient with phlebothrombosis is always a potential fatality.

CLINICAL FEATURES

There are certain clinical features of this disease which are of interest. In the 'quiet' form, or phlebothrombosis, a considerable number of veins may be filled with the thrombus even to a level above the knee without creating any symptoms or signs. Sometimes the process begins in a more acute and inflammatory manner so that the ambulatory patient will show lameness and swelling and the bed patient will complain early of pain in the calf. The signs and symptoms often are influenced by the position of the individual, the bed patient apparently experiencing very

*Presented before the Junior Cabell County Medical Society, at Huntington, September 4, 1947.

little pain and showing no swelling because of the ease with which the venous blood returns toward the heart; on the other hand, in the erect position, the return of the venous blood to the heart is not so easy and pain and swelling are more apt to appear.

Most venous thromboses tend to propagate cephalad beyond the veins of the lower leg but some clots halt without any particular treatment. A soft, noninflammatory clot may fill the femoral vein or even go higher without creating enough obstruction to interfere significantly with the blood flow. Usually, however, an inflammatory reaction develops so that obstruction of the main vein of the extremity sooner or later is complete. Thus, venous thrombosis tends toward the typical thrombophlebitis or the 'milk-leg' of a few decades ago. One cannot predict the course in any given case and the thrombosis can occur, propagate, and recur without causing venous obstruction to a sufficient degree to call attention to its presence.

The mature inflammatory thrombophlebitis does not, as a rule, detach soft emboli. In the early phase of propagation, a long detachable mass may form in the vein without causing much obstruction and then may detach *en masse* and cause immediate death when it reaches the pulmonary circulation. Sometimes small pulmonary emboli give warning of larger ones to follow. Bilateral processes are quite common so that one should anticipate a thrombotic process in the relatively 'quiet' leg. Thrombosis tends to mount higher in the left leg which is the classic site of involvement. However, symptoms may develop initially in the right leg almost as frequently as in the left.

The ease with which one establishes a diagnosis depends upon whether the disease is 'quiet' or 'outspoken'. It must be remembered always that the quieter the disease, the greater the possibility of embolism. In the case of the ambulatory patient clinical signs and symptoms usually develop earlier in the course of the disease than they do in the case of the bed patient. Lameness of the foot or leg, edema of the ankle, cyanosis of the foot, resistance of the calf muscles to pressure or stretching, and local tenderness along the course of the deep veins are classical signs. Unless the popliteal vein is involved, serious enlargement of the lower leg is not apt to occur. In bed patients these signs may not be present or may not be so evident and one must be alert for increase in temperature, pulse, and respiration occurring over a period of twenty-four to forty-eight hours. When the femoral vein is completely obstructed, making the diagnosis is simple, for the whole leg is enlarged and painful. If such a situation exists in one leg, one must not overlook the probability of a similar but less marked process in the opposite leg.

When thrombosis occurs in a superficial vein which is not a varicosity, a deep thrombus probably is developing also. While this may be true of thrombus formation in a varicose vein, independent thrombosis in varices is more common than it is in normal superficial veins.

Thoracic pain of some description is the most frequent symptom of pulmonary infarction or embolism. The pain is more often of a pleuritic nature but may be substernal and of such severity as to simulate pain of cardiac origin. A cough often is an accompaniment and when associated with hemoptysis is practically pathognomonic. The collateral circulation in the lung is such that a fairly large pulmonary embolism may be more or less silent. If a large embolus suddenly cuts off the circulation to a large area of the lung, general circulatory collapse will occur. Cyanosis and dyspnea are present in cases of larger embolisms and cardiac embarrassment on the right side may develop. A normal x-ray picture of the chest does not disprove the diagnosis of pulmonary infarction, especially if it has been taken at the bedside. On a properly exposed film the appearance of a pulmonary infarct often is characteristic. Electrocardiographic findings may be pathognomonic. At any rate, the electrocardiogram frequently is significant in excluding coronary occlusion. According to Murray of Toronto, of all persons surviving the first pulmonary embolism, about one in five is apt to succumb to future embolisms or to an aggravated effect on the original embolism or subsequent emboli by a propagating thrombosis.

TREATMENT

Concerning the treatment of this condition, one thinks first of prophylactic measures. Any factors which might maintain an active, even flow of blood through the legs should tend to decrease the incidence of phlebothrombosis. Variations in venous pressure and stasis associated with muscular relaxation should be avoided. The Fowler position is conducive to thrombosis because the legs are dependent and relaxed. Tight abdominal dressings and binders are dangerous. As soon after operation as is feasible, active exercise of the feet and legs should be encouraged. Wrapping of the feet and legs with ace bandages to the knees or even to the groins has been carried out in some clinics with apparent success. This is done in order to increase the rate of flow in the deep veins.

Early ambulation is helpful in prevention of thrombosis but does not preclude its development. It is perhaps most effective following childbirth. Such a measure is impossible in many cases of fractures of the legs and in certain grave medical conditions such as cardiac disease.

Prophylactic section of the femoral vein at a point just distal to the profunda tributary is being rather widely used in preparation for operative procedures, especially in elderly persons and in patients with prostatic or malignant disease. Sometimes this procedure is employed in patients with cardiac disease or with one of the wasting diseases when prolonged bed rest must be considered. Some clinics advise prophylactic femoral vein section in almost all persons over age 65 and many advocate almost routine section in lower leg fractures in persons beyond the age of 50.

Anticoagulants (heparin and dicumarol) have been employed prophylactically following operation. Murray of Toronto, certain physicians of Sweden, and those of the Mayo Clinic advocate such prophylaxis. The drugs should not be used until several days have elapsed following operation or injury, and great care must be taken when they are administered after extensive opertions because too much oozing may occur and dangerous loss of blood may result.

In choosing between prophylactic section and prophylactic anticoagulants, it is better to employ section if the danger of thrombosis is continuing or if the thrombosis is apt to recur (as in a two-stage operation), and to use anticoagulants if the threat of thrombosis is apt to be of short duration and the thrombosis is not likely to recur. After thrombosis has occurred, anticoagulants are again preferable when the exciting factor is temporary and when embolism has not yet appeared. Section of the veins, on the other hand, is to be preferred when the cause of thrombosis is continuing or when prevention of further embolism becomes necessary.

Bauer of Sweden advocates anticoagulant therapy with either heparin or dicumarol as soon as the earliest clinical signs of thrombosis appear. However, the Swedish group warns against beginning anticoagulant therapy earlier than the fifth day after the operative procedure which initiated the thrombosis. However, they do acknowledge the fact that embolism may occur during this five day interval.

In the administration of heparin, Homans uses the undiluted drug intravenously. The initial dose is 100 to 150 milligrams, followed on the same day by two doses of 100 milligrams, each at four hour intervals. Thereafter a 100 milligram dose three times daily at eight hour intervals is given. If systemic and local signs disappear within five days, the patient may become ambulatory and the drug is discontinued in twenty-four hours. Most clinicians prefer daily blood clotting time determinations so as to adjust the dosage, but Homans maintains that such determinations, even when done by experts, are not very informative. He therefore advocates the above regimen as a routine and makes no attempt to alter the dosage on the basis of repeated blood clotting time determinations. Some work is being done on the use of a vehicle for heparin which will bring about slower and steadier absorption of the drug somewhat as beeswax is now used for penicillin.

When dicumarol is to be used for anticoagulant therapy, heparin can be used during the first twenty-four to thirty-six hours since it takes dicumarol that long to become effective. Dicumarol is administered by mouth and should never be used unless the prothrombin time and the prothrombin blood plasma level can be accurately followed. One should try to obtain a prothrombin time of around 35 seconds instead of the normal 13 to 17 seconds. At the same time the plasma prothrombin concentration should be reduced to 20 per cent of normal. The dosage is difficult to regulate, but an initial dose of 200 or 300 milligrams is used (200 milligrams is generally safer) and then a daily dose of 200 milligrams or less is administered. The first effect on the prothrombin level will not be observed until the end of the second day. Frequently, the dosage during the first forty-eight hours has been too large and one finds that the prothrombin concentration has fallen too low. Even a first dose of 300 milligrams followed by 200 milligrams on the second day can produce such an effect. The individual response to this drug is extremely variable and it is not known whether or not this is due to differences in the resistance of the liver to the drug or to variations in absorption from the intestinal tract. If the rate of drop in the prothrombin level is slow, the dose may be increased if the blood levels can be followed closely. If the initial rate of fall is rapid, then one should wait twenty-four to forty-eight hours before giving additional dicumarol. This is a dangerous drug and is never to be used in the absence of proper facilities for control of its effect. The anticoagulants ordinarily should be continued for a few days after the patient becomes ambulatory.

When thrombosis in the veins of one of the lower legs is discovered early, even before embolism is known to have occurred, the operative

procedure of choice is bilateral femoral vein ligation at the groin. Unilateral section should not be done in postoperative, traumatic or cardiac cases because of the high incidence of bilateral involvement in such instances. This frequently has been illustrated by post mortem dissection of the veins of the legs. Time after time careful examination of the 'silent' extremity shows that the deep veins contain thrombi. The choice of the level of ligation has been the subject of much discussion. When the femoral vein is ligated distal to the entrance of the profunda branch, there is less interference with the venous circulation in the extremity than when the vein is ligated proximal to this point. This does not, however, give as complete protection against embolism, because the deep muscular tributaries frequently are the points of origin of thrombi, and, also, ligation below the profunda can force thrombosis into the deep venous system. Anticoagulants used postoperatively may alter the ideas on this phase of the problem.

Exploration of the common femoral vein in the groin is an accepted procedure in the late cases in which the leg is enlarged and the process apparently has already involved the femoral vein. In this procedure a segment of the vein is isolated and a longitudinal incision is made in the vein and the thrombus is sucked out of the vein by a smooth glass tube. The tube is inserted proximally and distally, applying gentle suction, until free bleeding is observed from above and from below. The vein is then ligated and divided, a small segment usually being excised. There are three main objctions to this procedure. First, if the main vein is only partially obstructed by the thrombus and most of the collateral venous circulation is filled with the clot, ligation may lead to sudden pooling of blood in the limb sufficient to precipitate shock. Second, overdistention of the limb may follow this kind of venous section. Third, there is the danger of releasing emboli into the proximal veins of larger caliber, although most authorities discount this latter possibility.

In the event of an established thrombophlebitis, suction extraction of the clot and section of the vein as described above may be used but are not generally accepted as preferred treatment. Lumbar sympathetic block with procaine in these cases abolishes the reflex sympathetic vasoconstriction and helps control the edema. Relief of edema is indeed the chief aim of therapy in these instances, because the venous channels are so obstructed that section is of no value and the danger of embolism (except for the contralateral limb) is remote. Anticoagulants may be used to advantage in conjunction with sympathetic block.

Ligation of the common iliac veins or even the vena cava has been more widely performed in the past several years. This measure is to be considered in cases of high thrombosis since section of the common femoral vein is frequently unsatisfactory. These higher ligations usually are more effective in preventing embolism and they permit establishment of a collateral circulation by way of the rectal veins and, in the female, also by way of the uterine vessels. In unilateral common iliac ligations, the diverted blood is carried to the opposite side of the body; in caval ligations it passes into the portal system through the inferior mesenteric veins. Division of the common iliac vein gives good results in the long-standing or recurrent unilateral process. However, it is technically more difficult than section of the common femoral vein, and general or spinal anesthesia is required. Approach to the left common iliac vein is frequently very difficult since it lies medial to and deeper than the corresponding artery. The right common iliac vein is generally easier to approach but this operation on either side can be complicated by serious hemorrhage from a tear in a friable vein. Right or left common iliac sections are carried out through extraperitoneal wounds such as are used for exploring the ureter.

The indications for vena caval ligation are: (1) when the thrombosis is bilateral and the site of origin is obscure, (2) when obvious septic infarcts have developed following thrombosis of the deep pelvic veins, and (3) when the thrombosis is otherwise uncontrollable. It is used as a last resort, because certain reports notwithstanding, it may be a serious and dangerous operation. Approach is often made through a right extraperitoneal incision as advocated by Linton, but the lateral branches can be easily torn and hemorrhage therefrom is difficult to control. Homans prefers the direct anterior approach with a transperitoneal or an extraperitoneal paramedian procedure. This is never an easy operation but the risk, of course, diminishes in proportion to the experience and skill of the surgeon. In other words, if one has not had experience in this procedure, bilateral femoral vein ligation would be safer than vena caval ligation, although the result might not be as satisfactory.

The treatment of pulmonary embolism serious enough to cause cyanosis, respiratory distress, and evidence of right heart embarrassment is generally well known. The patient is placed in a sitting or semireclining position and oxygen is given by any available means. Vasodilator drugs such as papaverine and atropine usually are prescribed although it is not definitely known whether or not they improve pulmonary circulation. The patient

soon succumbs or begins to improve, the problem being settled one way or the other. If he survives, the legs should be elevated as soon as feasible (in about twenty-four hours) so as to diminish chances of reformation of the propagating clot. The thrombus is then taken care of as outlined previously.

Less serious embolisms are not much of a problem but serve as a warning that steps must be taken to avert further infarctions.

The Trendelenburg operation is not very practical except in the hands of a few operators and then only under ideal conditions. In this procedure the mediastinum is opened and the pulmonary artery is incised in order to remove the embolus.

SUMMARY

1. It is difficult to make generalized statements regarding the causes of, clinical course of, and treatment of thrombo-embolism.

2. One must consider the future condition of the thrombosed limb in selecting proper therapy, and weigh the possibilities of a crippled limb against the dangers from embolism.

3. Anticoagulant drugs are to be preferred over surgical vein section, if in the future they prove equally effective in preventing death from embolism.

4. Surgery is being done too frequently for the treatment of thrombosis of the lower limbs with the result that many disabled lower extremities are being produced.

5. The tendency today is toward increased use of anticoagulant drugs with frequent routine examinations of the blood.

6. Heparin and dicumarol are particularly indicated in cases of single episodes of thrombosis.

7. Interruption of the veins is advantageous when the causes of thrombosis are continued or recurrent or when serious embolism has occurred and further embolism would be fatal.

8. More specific therapeutic indications will no doubt result from the extensive work being done in this country and abroad on this problem.

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THE PRESENT STATUS OF URETERO-INTESTINAL ANASTOMOSIS*

(WITH CASE REPORT)

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The impression exists among the profession that ureterosigmoidostomy is doomed to failure because of the certainty of ascending renal infection. It is the purpose of this paper to point out (1) that this is an erroneous impression and takes a defeatist attitude, even though it be conceded that room for improvement exists and patients must be carefully selected for this operative procedure; (2) to summarize the advances which have been made in ureterosigmoidostomy during the past ten years; (3) to present a case report illustrating these features; (4) to indicate where further progress must be made if results from this operation are to become uniformly good. This paper will deal only with patients requiring ureterosigmoidostomy for carcinoma of the bladder although obviously there are other indications for the operation. The author's experience covers twelve cases or twenty-one transplants (in three cases only one side was done) and is statistically of no significance; however, certain definite impressions have remained regarding the present value of this operation.

What advice can be given the prospective candidate for ureterosigmoidostomy and cystectomy? He may well ask the following questions: Isn't it unnatural to void rectally? Won't I be incontinent? Isn't the operation dangerous? Will I have an ascending kidney infection?" It is not as unnatural as might be supposed to void rectally. It is the normal course of events in birds to void via the cloaca; furthermore, urinary elimination in the early human fetus occurs through a cloaca. Patients with ureterosigmoidostomy are not incontinent. The anal sphincter is perfectly adequate. Bowel movements and urinary movements are separate. Patients rarely have to void during the night more than once. The operation definitely involves major surgery with a certain operative mortality but this is no greater than that for other types of major cancer surgery. Following the anastomosis there will be danger of renal infection, but this is by no means the inevitable result; since the introduction of sulfonamides and antibiotics, the incidence of pyelonephritis has decreased. The cause of renal infection following ureterosigmoidostomy is not (as many have supposed) because the ureters are

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emptying into a new reservoir, the sigmoid, which is loaded with colon bacilli ready to ascend to the kidneys. If urinary drainage is adequate, infection will not take place. But if stricture occurs at the site of the anastomosis, hydroureter and hydronephrosis will follow; and in this stagnant urine infection will almost invariably follow. It may be stated unequivocally that if a technique could be devised to eliminate stricture formation at the ureterosigmoidal junction, renal infection would rarely take place.

METHODS OF TREATMENT

There are, of course, other choices of treatment open to the patient with carcinoma of the bladder. Grade I papillomata respond well to fulguration, either through the cystoscope or via the suprapubic route. However, this lesion should more properly be regarded in the precancerous class than in the cancerous and should never require such radical treatment as cystectomy. Implantation of radon seeds[1] and deep x-ray therapy, especially in conjunction with fulguration, are useful in the treatment of small lesions and those of low grade malignancy (grades I and II) or as palliation for inoperable malignancies. Permanent cure of cancer grade III or IV by these methods is not common and the discouraging results obtained have led urologists in recent years to more frequent attempts at radical surgery. Partial bladder resection, with reimplantation of one of the ureters if necessary, is an excellent procedure. Unfortunately, cases suitable for partial cystectomy are infrequent; most neoplasms of the bladder are located in its posterior wall close to or in the trigone. Cystectomy with cutaneous-ureterostomy requires the wearing of a cumbersome apparatus which is apt to leak; these patients are not without danger of renal infection and their usual activities are more or less hampered.

INDICATIONS FOR URETEROSIGMOIDOSTOMY

Patients should be carefully selected for ureterosigmoidostomy. The operation is indicated only for those in whom some measure of success may be expected and for whom more conservative measures will not help. Thus the operation may be recommended (1) for large superficial or multiple growths; (2) for tumors involving the trigone or bladder neck, especially those of grade III or IV; (3) there must be no extension through the bladder wall as determined by rectal and vaginal examinations (and by intraperitoneal examination at the time of ureterosigmoidostomy; (4) the patient must be in good enough physical condition and have enough life expectancy (70 or under) to warrant such major surgery. Anyone who has observed a patient with carcinoma of the bladder in his last few months would be almost certain to select any method of treatment, regardless of risk, which would eliminate the agony and human degradation which accompany the terrible urgency and spasm which frequently remain unrelieved even after heavy sedation. Palliative cystotomy or x-ray rarely help in these stages.

TECHNIQUE

All methods of ureterosigmoidostomy during the past twenty-five years have been based on Coffey's three techniques. In all of them a bed or trough is fashioned in the wall of the sigmoid for each ureter: a short longitudinal incision is made in the sigmoid down to but not through the mucosa. The edges of this incision, including the muscularis, are undermined and approximated over the ureter (which has been brought into the peritoneal cavity after severing it from the bladder). In Coffey I and Coffey II procedures, a stab wound is made in the distal end of the trough so that the ureter can be made to enter the sigmoid. The second method differs from the first in that in Coffey II catheters are placed in the ureters and kept there for about a week in order to insure patency. In Coffey III the anastomosis is accomplished by establishing a fistula between the ureter and the sigmoid; this is done by placing a necrosing suture through the mucosal surfaces of both structures and tying it tightly. Coffey believed that the intact mucosal floor of the trough would have a valve-like action, so that a bolus of stool, descending past the site of anastomosis, would exert pressure on the imbedded ureter causing the latter to close off momentarily. Such a valve probably does not function,[2] but its action is not necessary inasmuch as the prevention of ascending renal infection depends on adequate urinary drainage. The operation may be performed transperitoneally or retroperitoneally. Since the advent of sulfonamides and antibiotics most operators have been using the former method which allows the site for the anastomosis to be selected under direct vision. The possible immediate postoperative complications are (1) peritonitis, (2) fistula, (3) uremia and (4) renal infection. The causes of these complications are obvious. It may be stated however that the immediate initial flooding of the peritoneal cavity rarely causes peritonitis; it is usually due to the subsequent breaking down at the site of the anastomosis.

RECENT ADVANCES

The advances made in ureterosigmoidostomy during the past ten years have kept step with those made in medicine in general. The employ-

ment of vitamins, intravenous fluids, plasma and blood both preoperatively and postoperatively permits the more debilitated patient to withstand extensive surgical procedures. Sulfonamides, penicillin and streptomycin have been invaluable in combating infection. Preoperatively, sulfasuxidine or sulfathalidine is given in order to lower the virulence of the intestinal flora; sulfadiazine and penicillin are administered in order to ward off any potential renal infection. Penicillin is left in the peritoneal cavity at the end of the operation as a prophylactic measure against peritonitis. These drugs are continued during the patient's postoperative course, and should evidence of renal infection appear, streptomycin may be helpful. However, it must be emphasized that no amount of sulfonamide drug or antibiotic will permanently clear up renal infection if urinary drainage is inadequate. They are beneficial only in preventing infection or in helping combat infection during the period of temporary edema at the site of the anastomosis immediately following the operation. If stricture replaces the edema, medication will be of no avail. Improvement in anesthesia has increased the safety of the operation; furthermore, continuous spinal anesthesia permits longer operative procedures. Thus, both ureters may be transplanted at the same time or the cystectomy done at the time of the second ureterosigmoidostomy.

NEW TECHNIQUES

All recent modifications of the Coffey operations have had but one goal: to prevent stricture formation at the site of the anastomosis. A few of the more outstanding attempts will be mentioned. Davalos'[3] modification of Coffey I allows the imbedded ureter to enter the sigmoid on a wide mucosal flap placed at the distal end of the trough. Up to this step, the drainage of the imbedded ureter is under the direct observation of the surgeon; theoretically, there should be no further compression of the ureter after the opening in the sigmoid is closed over the flap. The Davalos operation is definitely a more complicated procedure than the original Coffey I and further reports must be awaited before evaluation can be made.

Jewett[4] tries to establish good circulation and healing in the ureteral bed before completing the anastomosis. He implants both ureters into respective troughs in the sigmoid but does not interrupt their continuity with the bladder. At a second operation, that part of the ureter between the sigmoid and bladder is sectioned; a specially constructed electrode is then introduced into the proximal ureteral stump so as to produce a ureterosigmoidal fistula; the stump is then ligated. The use of a special device and the production of the fistula at the second operation complicates the procedure and does not necessarily prevent stricture. Flocks[5] has recently modified this operation: he makes the anastomosis (using the Coffey II catheter technique) at the first operation but maintains the ureter's continuity with the bladder; the latter is easily interrupted at the second operation. He believes the important feature is keeping the circulation from both ends of the ureter intact until the transplant has become effective. He reports that his results have shown improvement since his adaptation of this method.

Lubash[6] has modified Coffey II by substituting a short tantalum tube for the catheter at the site of anastomosis. This tube is usually extruded within a few weeks. The chief objection to Coffey II has been the fact that tissue-irritating catheters are supposed to be conducive to stricture formation. Tantalum is inert to all chemicals produced by the body and, it is said, will not set up a foreign body reaction. In his most recent experiments, Lubash has been placing the ureter within the tantalum tube (with ureteral flaps also covering the outside of the tube). This is intended to ward off external pressure from the contracting musculature of the trough. This method is somewhat similar to the use of permanent tantalum tubes in the anastomosis of blood vessels; Lubash intends that these tubes be permanent also. Whether or not the peristaltic movements of the ureter and intestine will be able to expel this inert foreign body remains to be seen.

Most urologists still do the Coffey I or Coffey II methods because of their simplicity. Advocates of Coffey I believe that stricture formation can be for the most part prevented by (1) being careful not to constrict the ureter when approximating the flaps of the trough, and (2) by maintaining the ureteral circulation by leaving plenty of periureteral tissue attached when the ureter is freed from its normal course. Nevertheless, stricture formation is apt to occur in about one out of three cases of even the most experienced in this type of surgery.[5] Who can tell how much edema or inflammatory reaction with subsequent constriction will take place in the individual case? In Coffey I the end of the ureter, either cut on the bevel or "fishmouthed," is drawn into the sigmoid through a stab wound and transfixed to the anterior wall of the bowel three-fourths of an inch below. Thus, a short stump of ureter protrudes into the bowel. By beveling or "fishmouthing" the end of the ureter, its closure is supposed to be prevented. Nevertheless, the writer has noted at two autopsies, one nine and the other thirty days postoper-

ative, that these stumps, now thick, gangrenous and almost occluded, still remained attached to the site of the anastomosis. Thus, although it is a temporary one, a second type of obstruction (other than stricture) frequently occurs following the Coffey I procedure. Recently, Jidigian and Biekers[7] of Beirut have been trying to prevent this occlusion by the following method: After the end of the ureter is "fishmouthed," the flaps are turned upward like cuffs and held in place by a stitch of plain catgut.

CASE REPORT

Because of the objections to Coffey I previously noted and because his clinical results have warranted it, the author has recently changed from the Coffey I to the Coffey II method. Futhermore, he has a sense of security in leaving the operating room knowing that with the use of catheters the anastomosis is patent and functioning. The following case history is presented in order to illustrate many of the points noted.

H. B., a 52 year old white male, was admitted to Memorial General Hospital, Sept. 3, 1947, complaining of hematuria and dysuria of three and one-half weeks' duration. He had had a partial resection of the bladder three years before because of carcinoma involving the anterior wall near the vesical neck. Following this operation, he remained asymptomatic until three and one-half weeks prior to the present admission. Examination revealed a well developed and well nourished white male; all physical findings including rectal were normal. The urine was loaded with red blood cells. The blood count and nonprotein nitrogen were normal. An intravenous pyelogram showed normal upper urinary tracts; no definite filling defect could be made out in the outline of the bladder. Cystoscopy revealed a red, raised, granular area 2 cm. in diameter, and located about 1 cm. below the left ureteral orifice. A specimen was taken for biopsy and was subsequently reported as transitional cell carcinoma grade III. X-ray of the chest, spine and pelvis was negative for metastases.

Because of the location of the lesion, the comparative youth and good condition of the patient, the apparent absence of extension of the lesion in spite of its known duration and high grade malignancy, the patient was advised to have ureterosigmoidostomy and cystectomy. Because of the previous bladder surgery, it was decided to transplant the ureters separately. Preoperative preparation included the administration of liberal amounts of vitamin B and C. He was placed on a nonresidue diet for three days and allowed only clear fluids on the day before the operation. During this period the bowel was cleansed with daily saline enemas and mild cathartics. On the morning of the operation, enemas were given until returns were clear. Sulfasuxidine was administered for four days, sulfadiazine for two days and penicillin for one day preoperatively.

On Sept. 8, under spinal anesthesia, the abdomen was opened through a low right rectus incision. No evidence of metastases to the liver or regional lymph nodes was found; there did not appear to be any extension through the bladder wall. With the patient in the Trendelenburg position and the intestines packed out of the way, the posterior peritoneum was opened over the right ureter; the latter was followed down to the bladder where it was severed and the stump ligated. The opening in the posterior peritoneum was then closed. The end of the ureter was next "fish-mouthed" for ½ cm. and a No. 8 ureteral catheter passed to the renal pelvis. This catheter was fixed in place by ligating it to the posterior flap of the "fish-mouth" with No. 00 plain catgut. A No. 00 chromic suture, each end threaded into a curvey needle, was passed through the anterior flap of the "fish-mouth" to be used later as an anchoring suture. A trough, made in the manner described previously, was placed in that part of the sigmoid where tension

FIGURE 1

Intravenous pyelogram (15 minutes) seven weeks after ureterointestinal anastomosis. Very mild bilateral pyelectasis present.

or slackness of the ureter would be least. A rectal tube[8] was then passed by an assistant. Its end was easily guided by the operator to the distal end of the trough and a small stab wound was made directly into the lumen of the tube. The ureteral catheter was then passed into the rectal tube and out through the anus; the rectal tube was now withdrawn. The two curved needles threaded with the anchoring suture were next passed into the stab wound and out through the wall of the sigmoid ¾ inch below; by drawing up on these sutures and tying, the end of the uterer was fixed into the sigmoid. The trough was closed over the ureter with interrupted No. 000 silk sutures, every other one taking a bite of periureteral tissue; a row of Lembert sutures of the same material reinforced the closure. Five hundred thousand units of penicillin were left in the peritoneal cavity and the wound closed in layers, using cotton throughout. Sulfadiazine and penicillin were continued postoperatively. Prostigmine was given every four hours to prevent distention which is often a complication immediately following ureterosigmoidostomy. The patient was allowed out of bed the day following the operation. The catheter drained freely; it was removed on the eighth postoperative day. Thereafter, he had good rectal control. An intravenous pyelogram on the fourteenth postoperative day showed mild caliectasis on the right. Employing the same preparation and method of operation, the left ureterosigmoidostomy was done on Sept. 25. This time, however, the rectal tube could not be passed beyond the site of the right anastomosis, apparently because the sigmoid had become fixed. Rather than allow the new anastomosis to be under tension by placing it lower in the sigmoid, the ureteral catheter was inserted blindly into the colon where it remained coiled up (as shown by x-ray). Convalescence was again uneventful and on the thirteenth postoperative day, the catheter was passed per rectum. Three days later, an intravenous pyelogram showed little if any stasis on the left and the caliectasis on the right was improved. On Oct. 17, a suprapubic cystectomy was done with some difficulty, chiefly because of the dense adhesions secondary to the previous bladder resection. Examination of the specimen showed that the neoplasm had not yet extended to the muscularis; interestingly enough, the lesion was less than half the size seen at cystoscopy, undoubtedly because of the disappearance of edema and inflammatory reaction following diversion of the urinary stream. Eight days after the cystectomy, a radical perineal prostatectomy was done because of the fact that occasional recurrence may take place in the prostatic urethra following cystectomy alone.[9] Convalescence from both operations was uneventful with early ambulation again being practiced. An intravenous pyelogram taken Nov. 17 showed only very mild pyelectasis on each side (figure 1); furthermore, the concentrated contrast media outlined the sigmoid as clearly as might a barium enema (figure 2.) The patient was discharged from the hospital Nov. 18, 1947. Eight weeks later, when seen in the clinic, he stated that he had gained 27 pounds and that his health was excellent. He had no nocturia at all. He had returned to his work as a locomotive engineer.

This case is too recent to give any information as to the ultimate result. However, it does illustrate several points: (1) The patient, a comparatively young, healthy individual, tolerated this type of surgery extremely well. (2) The carcinoma was known to be of more than three years' duration, yet it was still within the confines of the bladder. (3) Complete relief of symptoms from carcinoma of the bladder was obtained by diversion of the urinary stream. (4) The sigmoid took over the function of the bladder efficiently. (5) Adequate preoperative preparation together with the use of sulfonamides and peni-

FIGURE 2

Intravenous pyelagrom (60 minutes) seven weeks after ureteraintestinal onastamosis. Right urinary tract still remains outlined, indicoting that drainoge on the left is better. The rectosigmaid is well outlined by the contrast media.

cillin undoubtedly made for smooth convalescence in this case. (6) Coffey II is a simple operation and insures patency during early postoperative days. If catheters are irritable to tissues, this irritability did not manifest itself in this case; actually, the result was a little better on the left side where the catheter remained for thirteen days. The use of soft rubber tubes probably would cause even less irritation than ureteral catheters. The operation described lends itself better to simultaneous bilateral transplantation for the rectal tube guide can be used for both sides before fixation of the sigmoid takes place.

CONCLUSIONS

From the foregoing, it is obvious that any improvement in ureterosigmoidostomy must be toward prevention of closure at the site of anastomosis. The newer methods of Davalos, Jewett, Flocks, Lubash and Jidigian, described herein, all hold promise but further reports must be awaited before final evaluation can be made. Meanwhile, in spite of failures, a sufficient number of successful results in the use of Coffey I (Marshall,[10] Higgins[11]) and Coffey II (Dodson[12]) has been reported to warrant the continued employment of the simpler procedures until others are proved to be superior. Unfortunately, as far as this writer knows, no one has ever succeeded in passing catheters up the ureters of a patient with ureterosigmoidostomy; therefore, it is impossible to dilate a stricture once it has occurred. With this in mind, the surgeon who advises ureterosigmoidostomy should be prepared to take down the anastomosis if hydronephrosis occurs, and perform a cutaneous-ureterostomy[13] before too much renal damage has taken place. It may be concluded, then, that ureterosigmoidostomy is not yet a perfected operation. At present, it offers the best treatment available for most cases of malignancy of the bladder with hope of both cure and allowing the patient to lead a normal life. The chances for success may be stated roughly to be something better than 50 per cent.[10] The alternative is the use of methods which offer not much more than palliation.

SUMMARY

1. The value of uretero-intestinal anastomosis in the treatment of carcinoma of the bladder has been discussed.

2. Advances in this type of surgery, including the use of sulfonamides and antibiotics, together with the newer techniques, have been summarized.

3. All new techniques have been devised with one aim, namely, to prevent stricture.

4. A case illustrating many of the points stressed has been presented.

5. Good results using present techniques should be obtained in a little more than 50 per cent of cases.

6. If the anastomosis is followed by hydronephrosis, cutaneous-ureterostomy should be done.

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OPTIMISM IN HYPERTENSION

The importance of hypertension as a medical problem becomes apparent when it is realized that about 15,000,000 people in the United States have some degree of elevation of the blood pressure. When one reflects upon our lack of understanding of the origin of this disorder and our lack of progress in its treatment, the great magnitude of the problem is again apparent.

In such a widespread disorder as this one, it is natural for the layman to hold certain views concerning it. These have in large part been based upon mortality statistics derived from insurance companies, all of which tend to emphasize the high death rate associated with hypertension. That this is true cannot be denied. However, there is a phase of the prognosis of hypertension which has received little attention; perhaps it does not lend itself easily to statistical analysis.

It is the fact known to all physicians that many hypertensive individuals have a favorable outlook for a normal life expectancy, with relatively little impairment in health. This is especially true of women. Our viewpoint on prognosis should acknowledge this brighter side and emphasize it. Perhaps in the future, statistics on this optimistic phase of the prognosis will be available.—Wm. D. Coventry, M. D., in Minnesota Medicine.

THE TREATMENT OF GRAVES' DISEASE*

By KINLOCH NELSON, M. D.**
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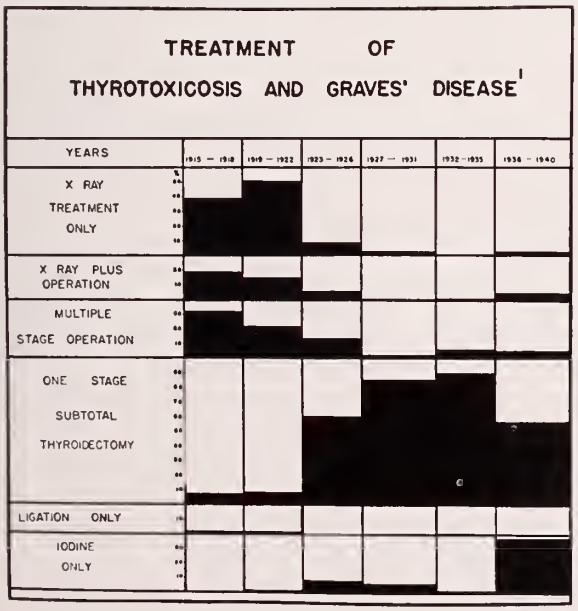
Between October, 1945, and October, 1947, fourteen cases of hyperthyroidism have been seen in the outpatient department or on the wards of the Medical College of Virginia. These cases serve to illustrate the changing ideas concerning the management of this disease.

The status of treatment up to 1942 is shown by figure 1 from Means,[1] It is seen that in the period 1932-35 surgery following iodine preparation was the treatment of choice in 90 per cent of cases, whereas from 1936-40 iodine alone sufficed for some 30 per cent. This change was based on Hertz'[2] discovery that those patients who made an unexpectedly good response to iodine were probably on their way to a spontaneous remission. Thus, in the average moderately toxic patient with an initial B. M. R. level of +40 to +50, iodine was not expected to bring about a reduction below +20 to +25, but in some the rate might fall to 0 or lower. In those giving this "superstandard response" iodine was considered to be the only treatment necessary. In 1940, then, most patients were treated by iodine preparation and subtotal thyroidectomy. Iodine alone sufficed in about one-third, x-ray alone in a few, and some combination of these in a small number.

Figure I.



Results that could be expected from iodine and surgery are illustrated by figure 2 from Vander Laan and Swenson's[3] review of 130 cases operated on at the Peter Bent Brigham Hospital from 1933-40. It may be seen that satisfactory results were obtained in 87 per cent and that the mortality was 3 per cent. Cases I and II illustrate this method. It is hard to see how any procedure could be more satisfactory than that shown in case I and on the contrary the results in case II leave much to be desired.

Thus matters stood until 1943 when Astwood[4] reported the clinical use of thiouracil based on the animal experiments of the MacKenzies and McCollum,[5] Richter and Clisby,[6] and Kennedy.[7] It soon became apparent that thiouracil would reduce the metabolism to normal or lower and bring about a clinical remission in a great majority of cases. Under the influence of this drug the thyroid gland became extremely hyperemic and hyperplastic, but no new hormone was formed or released so that as soon as the previously stored supply was dissipated a reduction of metabolism occurred. Thus it was possible to bring the most severe case of hyperthyroidism to operation in a state of relative normality. However, the technical procedure was rendered more difficult by the friable, easily bleeding nature of the gland substance. This was overcome by the administration of iodine toward the end of preparation with the result that the hyperthyroidism was controlled by thiouracil and the gland was involuted by iodine. Thus the mortality at the Lahey Clinic fell from .88 per cent before 1943 to .27 per cent since that time, with a rate of .17 per cent in 1945.[8]

Figure II.

RESULTS OF SURGICAL TREATMENT IN 130 CASES OF GRAVES' DISEASE[3]

Result	Percentage	
Satisfactory:		
Return to good health	61.5	
Hyperthyroidism (single complication)	13.9	
Exophthalmos (single complication)	7.7	
Unilateral temporary vocal cord paralysis (single complication)	2.3	
Temporary tetany	1.5	
Total		87
Unsatisfactory:		
Persistent or recurrent thyrotoxicosis	8.5	
Permanent parathyroprivia	0.8	
Vocal cord paralysis at first-stage operation	0.8	
Death	3.1	
Total		13

Early in the employment of thiouracil it was found to be a not unmixed blessing. Drug reactions began to appear, the most serious being agranulocytosis, at times resulting in death.

*Presented before the Fayette County Medical Society, at Oak Hill, West Virginia, August 5, 1947.
**From the Department of Internal Medicine, Medical College of Virginia, Richmond, Virginia.

Figure 3 is taken from the survey conducted by Moore and others[9] in 1946. About the same time Van Winkle and others[10] analyzed data on 5,145 patients treated by 328 doctors. Thirteen per cent showed some reaction, the only alarming or serious one being granulocytopenia in 2.5 per cent.

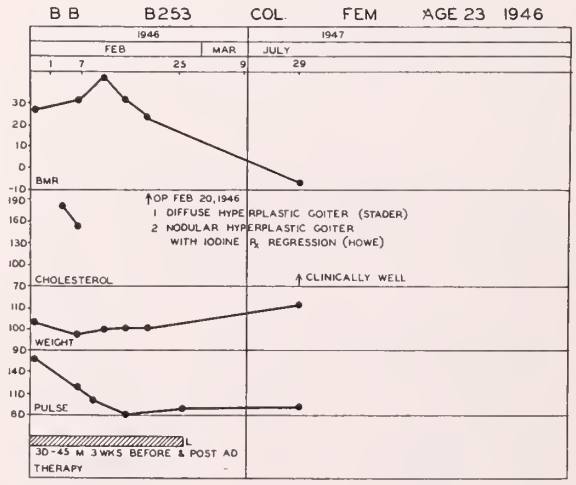
From these experiences it became clear that thiouracil alone added .5 per cent to the mortality when used as preparation for operation, but the patients came to surgery so well prepared that the operative mortality was lowered, with the result that the over-all mortality became as low or lower with combined treatment than it had ever been before. Cases III, IV, V, VI, and VII illustrate this approach.

Figure III.

TOXICITY OF THIOURACIL[9]

	Per Cent
1. Death under administration of the drug	.7
2. Death attributable directly to the drug	.5
3. Agranulocytosis	1.8
4. Death rate in agranulocytosis	26
5. Leukopenia without agranulocytic angina	3
6. Fever	5
7. Glandular enlargement	5
8. Miscellaneous reactions	2

With the advent of thiouracil it naturally occurred to many, as it had with iodine when Plummer[11] reintroduced that drug in 1922-23, that here might be a medicine which would serve to control the disease without surgery and thus remove the anxiety, danger, complications and expense of thyroidectomy. Williams and others[12] have reported 111 patients treated in this way.

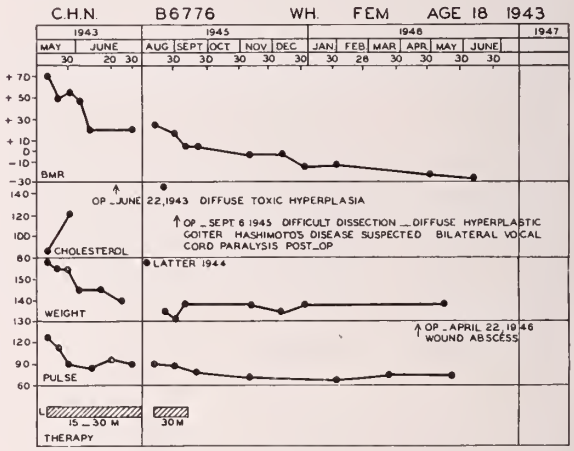


CASE I

Moderately toxic with symptoms for five months. Had probably "leveled off" from iodine received before admission. Uneventful post-operative course and well eighteen months later. Note that sections of gland were reported somewhat differently by two pathologists.

Fifty-one had remissions that lasted from three to thirty-one months; 44 have been well for a year or more, and 33 for eighteen months after treatment was stopped. Of those remaining well for a year only one relapsed. It was necessary to repeat the drug in some cases and a few required a maintenance dose. It is well to recall here that readministration has been thought by some to be more dangerous from the standpoint of reaction, as if the patient were sensitized by the first course.[13]

Efforts were continued to find an equally or more effective, and less toxic substance. In 1945 and '46 Astwood[14,15] reported the use of propylthiouracil in 100 cases without significant reaction. Hardy[16] has supplied us with data on 284 cases treated with propylthiouracil; 17, or 5.9 per cent, showed toxic effects, less than half the number reported with thiouracil. The reactions were in general much the same, but less



CASE II

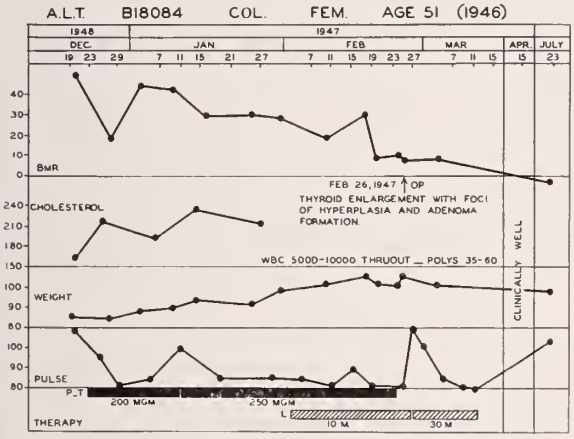
Very toxic in 1943 with symptoms for one year. Recurrence with moderate clinical toxicity two years later in 1945. Bilateral vocal cord paralysis following second operation, and wound would not close necessitating re-opening and drainage in 1946. Well since.

severe. Leukopenia was again the most significant, occurring in 2.8 per cent. There have been no fatal reactions. Lahey[8] reported one additional case in which the white blood count fell to 1,800 and no granulocytes were seen. The drug had to be stopped in 1.4 per cent as compared with 10 per cent when thiouracil was used. This procedure is illustrated by Cases VIII, IX, X and XI.

To cover the subject we must mention the apparently excellent results of the "newest" treatment, to which we do not yet have access, namely the use of radioactive iodine. Through its capacity for being traced by the Geiger counter it has been shown that the overactive gland of thyrotoxicosis takes up 80 per cent of the iodine given

by mouth, the rest being chiefly excreted in the urine, whereas the normal thyroid accumulates a much smaller percentage of the administered dose, the remainder again being excreted in the urine. Through this natural concentration a kind of internal radiation is administered by the use of radioactive iodine. Pioneer work in this field has been done by Hertz,[17] Chapman,[18] and others. Fifty-one cases have been reported, with good results in 40, or 80 per cent. Much remains to be investigated but it may well be that the treatment of Graves' disease will resolve itself into the administration of one or several doses of radioactive iodine.

One of the biggest problems in the treatment of Graves' disease is the management of malignant or progressive exophthalmos. It has long been known that in an occasional case, the exophthalmos progresses despite control of the hyper-



CASE III

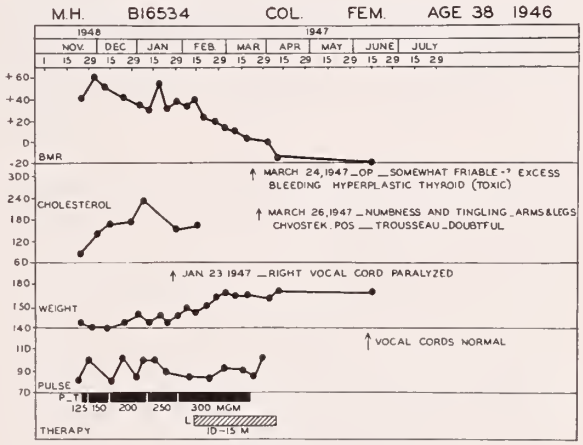
Clinically an adenoma of low grade toxicity with symptoms for two months. Received 200 mgm. of propyl-thiourocil daily for 3-4 weeks with little or no response, and only slight response to 250 mgm. daily for six weeks. Prompt response to iodine. Well eight months after operation.

thyroidism; in fact, this progressive exophthalmos may occur in the absence of hyperthyroidism, or even in hypothyroidism. It is hard to see how a worse calamity could be encountered. The idea has evolved that the exophthalmos in these cases results from overactivity of the thyrotrophic hormone of the pituitary gland which is ordinarily held in check by the thyroid hormone, so that the removal or inactivation of the excess thyroid hormone allows uncontrolled action of the pituitary hormone, with resulting progression of the exophthalmos. Means,[19] in 1945, and Martens,[20] in 1947, have discussed this situation. The clinical problem is to recognize, prior to treatment, which case is in this group. There seems to be no clear-cut answer but this disaster may be anticipated if anyone of the following conditions is present:

1) Edema of the orbital muscles, lids, or conjunctivas.
2) Proptosis, especially predominantly unilateral.
3) Ophthalmoplegia.
4) Changes in the fundus.
5) Chemosis and unusual tearing.
6) Eversion of the conjunctiva.

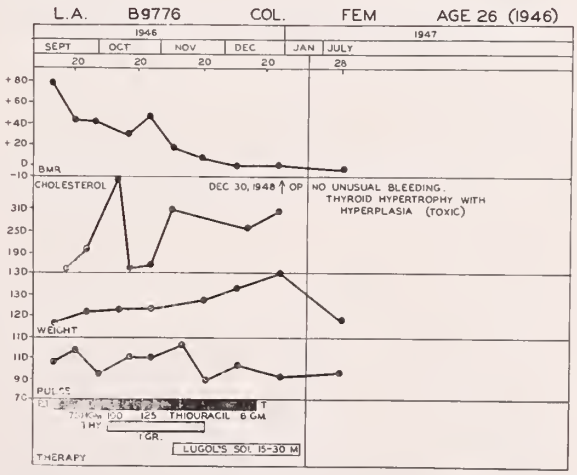
This condition is more prone to develop in middle-aged men. Operation is to be avoided in these cases. The difficulties involved here are illustrated by case XII (see chart).

This patient was first seen in 1942 when she was 29 years old and had had symptoms of thyrotoxicosis for 3 to 4 months. For several weeks prior to this observation she had noted increasing prominence of her eyes, more marked on the left, and there was swelling of the upper



CASE IV

Moderately toxic with symptoms for 9-12 months. Gland smooth and quite large, especially on right. Had had some iodine before admission. Response to propyl-thiouracil not striking. Right vocal cord paralyzed before operations was normal post-operatively. Transient post-operative findings of tetany. Well seven months after operation. Possibly illustrates the poor or delayed results from propyl-thiouracil if iodine is given first.



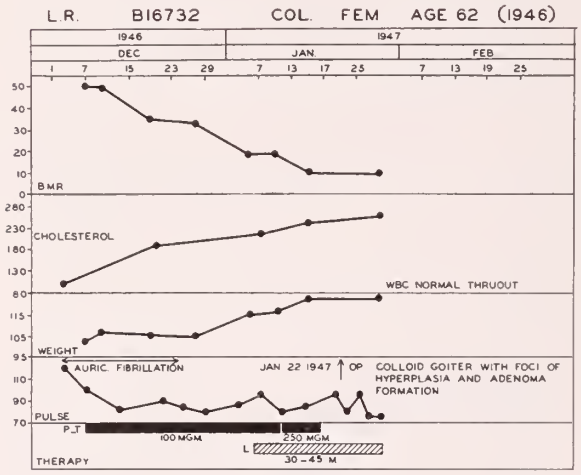
CASE V

Clinically very toxic with symptoms for four months. Fair response to propyl-thiourocil, which was replaced by thiourocil with further response. Received thyroid by mistake. Thiourocil probably continued for an unnecessarily long time. Well nine months after operation.

lids. There was some indefinite feeling of "double vision" at times. Examination confirmed the above and there was definite lid lag. No chemosis or tearing was noted and the extraocular movements were normal. X-ray of the left orbit was negative. As may be seen from the chart her response to iodine was spectacular and her eyes became no worse after her metabolism declined. She was considered to be a case with superstandard response to iodine and questionable liability to malignant exophthalmos.

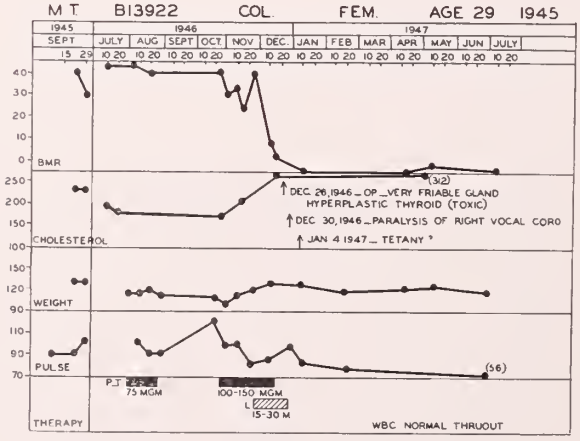
Observation in 1944 was limited because the patient would not return, but she did not appear to be particularly toxic and her eyes were better if anything.

In December, 1945, she experienced a marked clinical flare-up of thyrotoxicosis. Exophthalmos was again prominent, more marked on the left, accompanied by chemosis, soreness, fullness, and tearing in this eye. As may be seen from the chart, she was treated throughout early 1946 with iodine, 20-30 minims daily for her hyperthyroidism and thyroid, grains 1 to 2 daily for control of the supposed excess activity of the pituitary thyrotrophic



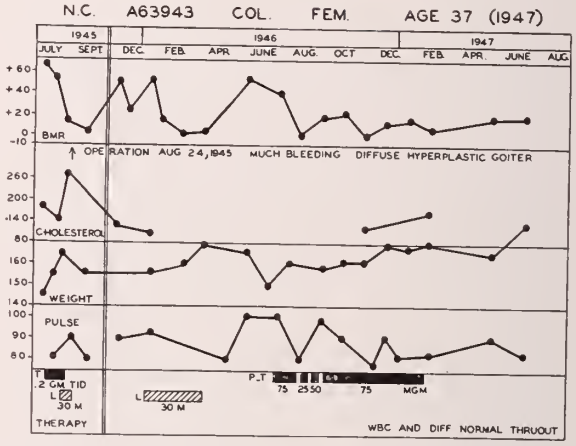
CASE VI

Moderately toxic with symptoms for 1-2 years. Good response to propyl-thioracil. Note reversion of cardiac rhythm to normal. Well six weeks after operation. Lost since.



CASE VII

Clinically very toxic with mental symptoms. Difficult to manage. No particular effect from propyl-thiouracil in July and August, 1946, and then lost from observation. Hospitalized in October, 1946. No striking response to propyl-thiouracil, 100-150 mgm. daily, for four weeks. Prompt response to iodine. Unusually free bleeding noted at operation. Post-operative persistent paralysis of right vocal cord and transient symptoms of tetany. Marked improvement in behavior and no evidence of toxicity nine months after operation.

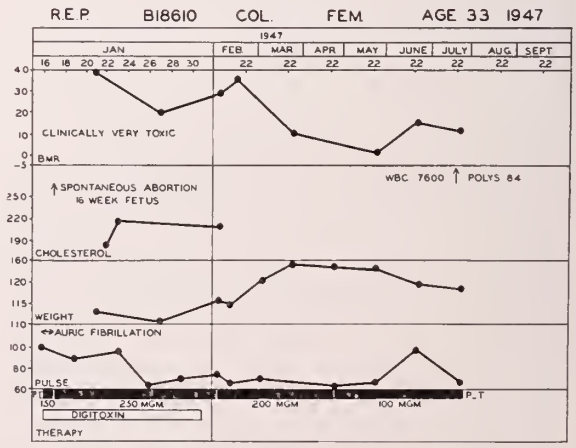


CASE VIII

Moderately toxic with symptoms for four months when seen in July, 1945. Nice response to thiouracil and iodine and operated on August 24, 1945. Recurrence in December, 1946. Second operation considered but refused. Responded to Lugol's in February, 1946. Drug omitted and again became toxic. Nice response to propyl-thiouracil for eight months and clinically well six months after drug discontinued, though B.M.R. continues to range around upper limit of normal.

hormone. By June, 1946, she was much improved in general and as to her eye findings, but she continued to be mildly toxic and it was decided to try her on propyl-thiouracil. There was very satisfactory response of the hyperthyroidism in early 1947 and her eyes remained all right. Granulocytopenia then developed, also thrombopenic purpura, attributed to the drug, which was promptly stopped, and these findings disappeared. From June, 1947, to October, 1947, she has remained free of toxicity and the eye condition has been satisfactory, slight exophthalmos persisting.

It seems unlikely that this patient represents a true case of malignant or progressive exophthalmos, as control of her thyrotoxicosis on two different occasions (1942 and 1947) was not followed by advance of the eye findings. However, her case is reported here as illustrative of the problems involved. Also, hers is the only case so far reported in which purpura developed while propyl-thiouracil was being administered.



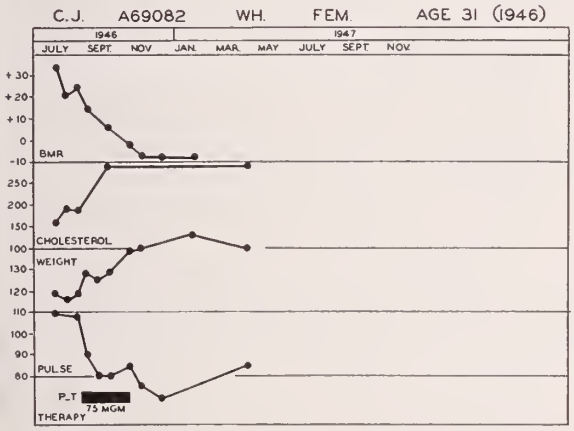
CASE IX

Clinically very toxic with symptoms for one year. Entered hospital with fetal membranes protruding from vagina. Auricular fibrillation apparently began the day of admission and lasted forty-eight hours. Digitoxin begun and continued was probably unnecessary. Good control with propyl-thiouracil, 150 to 250 mgm. daily for six months. Now (October, 1947) has recurrence of toxicity three months after drug was stopped. Is being tried on iodine for "super standard response."

SUMMARY

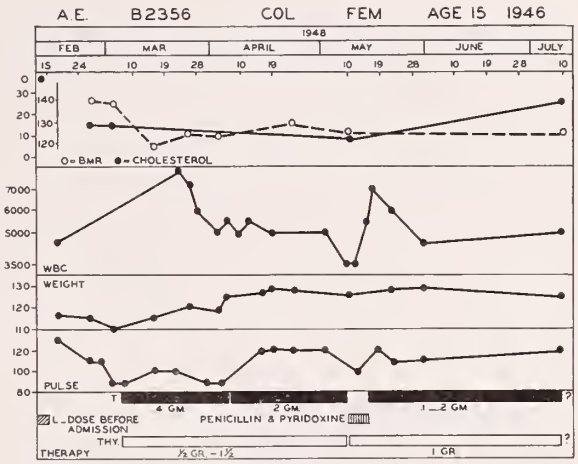
Fourteen cases have been observed in the past two years, of which thirteen were women. Nine operations have been done in eight cases with no deaths. There were two cases of recurrent hyperthyroidism; one was operated on a second time with subsequent bilateral vocal cord paralysis; the other has been controlled with either iodine or propylthiouracil. Two patients had transient postoperative manifestations of tetany, one of whom has had a persistent postoperative unilateral vocal cord paralysis. One patient had a vocal cord paralysis preoperatively which cleared up after surgery. Six patients have been treated nonsurgically. Two of these have been well controlled by thiouracil or propylthiouracil, or both. A third was well under control for six months while propylthiouracil was being given, but has now relapsed three months after the drug was stopped. One very toxic patient (case XIII), the only male, was treated with propylthiouracil and iodine as preoperative measures and then insisted on leaving the hospital. He was reported to be well and working six months later. One woman (case XIV) with clinically ill defined toxicity showing poor response to iodine, has apparently been controlled by x-ray treatment. One case of suspected malignant exophthalmos has gotten along reasonably well over a five year period on iodine, propylthiouracil and thyroid, at various times.

Thioracil, or propylthiouracil, or both, have been employed at some time in twelve cases. They had to be permanently discontinued in only one case in which granulocytopenia and thrombopenic purpura developed while propylthiouracil was being administered.



CASE X

Clinically slightly toxic with symptoms for six months. Had had a mild flare-up in 1938 controlled by iodine. Extreme response to propyl-thiouracil, 75 mgm. daily, for two months, with clinical suggestion of myxedema. Continues well one year after drug was stopped (October, 1947).

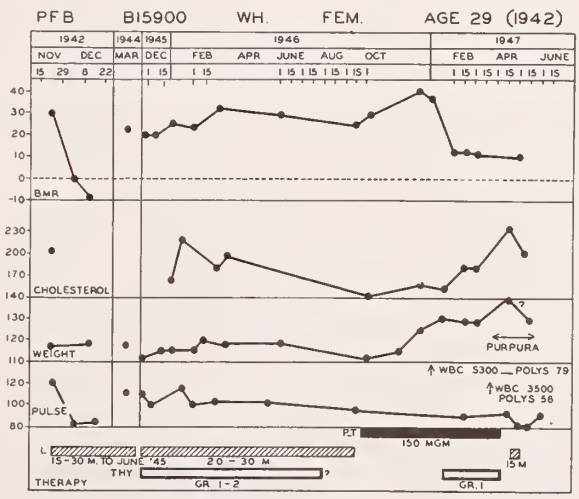


CASE XI

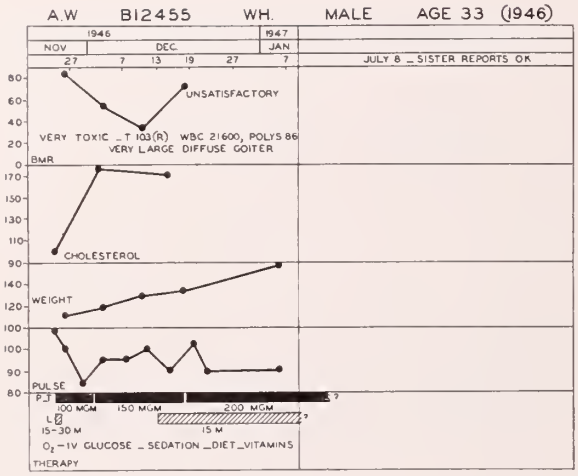
Clinically very toxic with symptoms for one year, during which time she had received iodine irregularly. Responded to thiouracil, .4 and the .2 grams daily. Drug discontinued because of leukopenia and later resumed without toxic effect and good control. Received varying doses of thyroid because of fear of malignant exophthalmus. Lost from observation in July, 1946, after being treated about six months, but reported to be well in July, 1947, one year after drug was stopped.

CONCLUSIONS

At the present time there is generally available in the treatment of Graves' disease a variety of procedures based on the administration of iodine, anti-thyroid drugs, the employment of surgery, the use of x-ray, or some combination of these. When to use which is not entirely clear. Iodine alone should suffice for those giving the "super-standard response"; also this procedure carries no risk. In women with mild toxicity and a small goiter who do not show this response, propylthiouracil may be employed as definitive treatment; results will be delayed or poor in many cases if iodine has been given first. It does not seem likely that the effect of x-ray, a relatively harmless procedure, has changed much since Means[1] reported its successful use in one-third



CASE XII

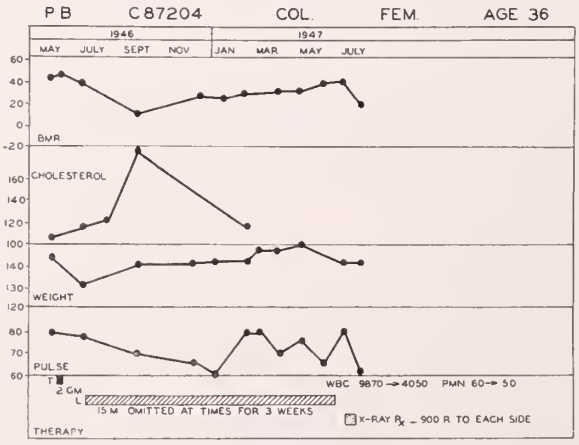


CASE XIII

Clinically extremely toxic bordering on crisis with symptoms nine months. Very large goiter. Good response to propylthiouracil and discharged to Out-Patient Department in December, 1946, for further treatment. Iodine added as pre-operative procedure. Patient could not be persuaded to return either to clinic or hospital. Reported to be well and working in July, 1947, about six months after therapy was stopped.

of his cases; certainly it may be selectively employed. Surgery after proper preparation is the procedure of choice in patients with large goiters, especially in those in whom pressure is suggested; it is also probably the best course in toxic patients who will not follow directions or return for observation, and in cases with nodular goiter because of the statistical possibility of malignant change in these glands. It should never be forgotten that the development and perpetuation of Graves' disease is frequently, if not usually, related closely to some nervous upset experienced by the patient, and that many patients will recover spontaneously if their surrounding difficulties can be alleviated (Astwood[21]).

Finally, as in other diseases, the treatment of hyperthyroidism consists of the judicious selection of the available procedure best suited to the individual patient. Whatever plan is chosen, there are now a number of alternatives which may be tried with reasonable hope of success and without too great risk.



CASE XIV

Toxicity mild or doubtful with vague symptoms for four months. Begun on thiouracil, which was stopped because of fall in WBC. Fairly well controlled at first with iodine. Treated with x-ray and now well controlled with weight rise to 160 and B.M.R. -13 (October, 1947).

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GERONTOLOGY AND GERIATRICS

Of late, there are already the rumblings, distant as they may be, of the more daring spirits who question the inevitability of senescence. Is senescence really inevitable, or is it the result of preventable pathologic states? The answer to this lies in the distant future. However, there seems to be a slow but definite realization that many conditions grouped under senescence are rather the results of earlier unrecognized or improperly treated or, at the present, incurable pathologic invasions, just as rachitic destructive changes are the results of improperly treated or undiagnosed rickets.

It is gerontology which is endeavoring to unravel this chain of vicious cycles leading to senescence, and to turn over its findings to the geriatrician to be applied to the care and treatment of the community not only at the age of senescence, but in the pre-senescence age, so that many of the ravages found in senescence may be prevented.

Gerontology is not offering immortality, not as yet at any rate, but is endeavoring to make life run on a more even keel, and to mitigate the disabilities of the advanced years. And here is where the general practitioner is put to the test; the part he will play in these newer developments will depend on his willingness and readiness to meet the newer situation. For while gerontology, as the study of health of the aged, and geriatrics, as the application of the results of that study, are indispensable, there is no real need to build up geriatrics as a distinct specialty to be practiced by a limited number of physicians who will devote themselves to that work only, for the general practitioner is indeed the geriatrician par excellence.

He who knows the pre-senescence members of the community is the best one to follow them through their later years of life. For as a matter of fact, there are no definite lines of demarkation as to where senescence really begins; according to some authorities, it begins almost at birth.—Herman Seidel, M. D., in Geriatrics.

DIABETICS HEROES

Diabetics must be either masochists or heroes—at least, so I think since I tried to inject myself. Last month I had a stye (hordeolum to some). I had heard of the new drug penicillin, so bought be a mega-unit—and very expensive it was too. A syringe was boiled in the egg saucepan and I was ready to deliver the first dose.

Now, in illustrated advertisements for a brand of insulin, I have seen a lady in her negligee nonchalantly inserting a needle into the front of her thigh. I pinched up a morsel of skin—after cleansing it, of course—but this was painful. Next I stretched the skin tight, and keeping the needle nearly horizontal to the surface I slowly but surely slid it through the epidermis. This was pretty agonising but it was nothing to what I felt when I pressed the plunger. Penicillin is anything but painless, take it from me. I leapt to the mirror but the stye (pardon—hordeolum) was still there.

The next twelve hours were overshadowed by the thought of the remaining half-million units. After all I couldn't waste them. All attempts to enlist the assistance of my wife failed, so I had to administer the final shot myself. This time I thought that the intramuscular gluteal approach should be tried. Trousers down, buttock cleansed, I stood before the mirror with needle poised. Right toe in, weight on the other foot—that relaxes the glutei, you know—eyes shut and "Ouch!" My Goodness; there was the needle embedded up to its hilt and all I had to do was to fit the syringe into the needle. Easy? Well; you try it in this posture. In the end I just stood like a darts board with the triumphant "double top" until my wife came to the rescue. She was so convulsed with laughter that at least 250,000 units went down my leg.

However, my hordeolum did very well on hot boric spooning thank you.—In England Now feature in The Lancet.

STEPCHILDREN OF MEDICINE

For too long have arthritis and allied rheumatic conditions been the undramatic stepchildren of medicine. And yet, they are responsible for more time lost from work and persistent discomfort than any other single disease. The time has come when the medical profession must take more than a casual interest in a disease in which much can be done prophylactically by individualizing treatment along lines of a broad and all-inclusive program. For in this field, to rely on a single procedure such as a pet "shot" or an occasional diathermy treatment, no matter how expertly given, will do little to lower the number of therapeutic failures. Thus, to treat arthritis successfully, one must bring into play simultaneously all the supportive factors from the fields of pharmacy, orthopedics, and physiotherapy. —Nathan Sussman, M. D., in Pennsylvania Medical Journal.

CEREBRAL PALSY

The broad field of cerebral palsy comprises some of the most perplexing problems of all medicine. It is not well for us to dwell entirely upon detailed procedures for there are no completely specific or adequate procedures available in this field. It is a matter of train, train, train, over a period of years, and honest anticipation of an end result which still contains a high degree of disability for the ordinary functions of living. Even the best trained athetoid remains a terribly handicapped person. The most completely treated spastic still carries a residual stigma. The ataxic never regains his equilibrium, and so on through the various patterns; this group of diseases or type of disability leaves an indelible mark.

It may well be said that the problems of the cerebral palsy victim vary widely from one case to another. The prognosis is rather difficult to determine. The program of treatment requires long years of training and utilizes many of the techniques of the occupational, physical and speech therapists, subjecting such a program to the prescription and constant supervision of physicians who are familiar with the problems of cerebral palsy and are willing to combine the general medical, neuropsychiatric and orthopedic points of view in the final over-all evaluation of the child and that child's response to the program. No specific therapies are available. The various proposed drugs are worthy of further study and trial. The various surgical, bracing and training techniques find indication in individual cases. Training must be adequate, prolonged, and in keeping with the needs and posibilities of each individual for participation in the varied aspects of community life.—Carl D. Martz, M. D., in J. Indiana St. Med. Assn.

The President's Page

The annual meeting of the West Virginia State Medical Association at Huntington this month will undoubtedly be an important event for every doctor in West Virginia. The members of the Cabell County Medical Society have been very busy in arranging this meeting, and, of course, they have had their difficulties, which will probably all be ironed out before we meet in convention. It is needless to say we have had a great deal of difficulty in accommodating all of the doctors who wish to be with us; nevertheless, we want each one of you to come, and believe me, every effort has been put forth to make you as comfortable as possible.

At this writing, I have visited every county medical society in the state. I have made about ten extra visitations, talking on allied subjects of medicine, particularly referring to the program of cancer. To each of these medical societies I have tried to present a program of organized medicine which I, as well as many of my colleagues, think needs our attention this year. At the two sessions of the House of Delegates, there will be many subjects brought to the floor for discussion, and in many instances resolutions of importance will be offered.

Whether right or wrong, I have again stepped into the question of a four-year medical school. Certainly there seems to me to be a marked change in the situation during the past few years. Not only does the need seem apparent, but there seems to be a great deal of interest among the members of our profession. Our committees have been at work and will be able to give a satisfactory report, which should arouse a great deal of discussion.

In every instance in talking on this subject I have refrained from entering into any controversial topic such as the location of a medical school, the cost of such, and the possibility of faculty representation. I feel that all these subjects can best be worked out by the committees concerned, i. e., the Committee on Medical Education of the American Medical Association and the Association of Medical Colleges in the United States.

We have also talked about the reorganization of our state health department. We have a number of suggestions to make, and we are particularly interested in the program that will generally improve the public health situation. As each of you know, we have never been able to keep qualified personnel serving in this important department of the state. One of the chief reasons for this is the question of salary, which does not attract outstanding men. We should like to be in a position to make suggestions and plan from the point of view of the medical man. I think this program is important, and it will probably be given the proper consideration by everyone concerned.

Another important matter that deserves our consideration as medical men is the study of cancer control. Lay people are already devoting much time, thought and effort to the subject. Our committees which are studying this program will have something to offer. No doubt their suggestions, if accepted, will be of great benefit to the cancer patient. The program for cancer control in the state of West Virginia is meeting with more and more encouragement each year, and we as physicians should encourage every county medical society to step forward and do its job as it should be done.

In conclusion, it might be the idea of some that conventions are not altogether necessary, but it is a known fact that all organizations have their Jerusalem to which they travel each year to bring their wares and talk over their problems. In this manner of representation from every county (and we must have that) we can develop unanimous opinions on subjects pertaining to medicine. I feel that this year we do have a united front on the problems that are facing us today.

I assure you that it will be my personal pleasure, along with the rest of the officers of your organization, to greet you in Huntington.

Thomas Bee

President.

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THE 81ST ANNUAL MEETING

All is in readiness for the 81st annual meeting of the West Virginia State Medical Association at Huntington, May 10-12. Members of the Cabell County Society and Auxiliary are cooperating to the very fullest extent with the State Medical Association and Auxiliary in planning the 1948 meeting. Much credit is due Dr. E. J. Humphrey and the members of his local committee on arrangements, and Mrs. E. J. Humphrey, auxiliary convention chairman.

The scientific work committee, composed of Dr. Russell B. Bailey, chairman, and Drs. W. W. Point and George F. Evans, has arranged a program that is undoubtedly one of the best ever provided for a state meeting. It is a program that will appeal to general practitioners, as well as those engaged in limited practice. It is hoped that all members will read the program carefully. It is printed in this issue of The Journal.

As usual, the convention will open with a reception at the Hotel Prichard, Sunday evening, May 9, and will end with the annual banquet Wednesday, May 12. The banquet speaker, Dr. Irvin Stewart, Ph. D., president of West Virginia University, will have a message of great importance and interest to the members of the profession in this state. By all means come to Huntington, May 10-12. Better still, make arrangements to arrive in that city in time for the reception Sunday evening, May 9. You can help make the convention a success by attending the general sessions and night meetings.

CREATIVE THINKING AND OLD AGE

It is gratifying to observe the ever-increasing interest manifested in geriatrics. Since eventually all of us must grow old, this subject is indeed of significant concern. In considering geriatrics it must be remembered that not only the body, but the mind as well, is often affected by old age processes. Moreover, in order to appreciate the problems of older people it is necessary to understand the psychologic changes which so often accompany old age. Therefore, it is of distinct interest to review some of the important known facts of mental abilities of the aged.

It is well recognized that as people grow older, there is impairment of vision and hearing, reaction time is lengthened and immediate memory declines. As for new learning, it has been shown that this ability starts to decline in the late twenties. Thorndike, for example, has shown that there is a one per cent loss of learning ability per year after age twenty-five. Parenthetically, it should be mentioned here that this is one reason among several that many medical schools hesitate to accept students who are over thirty years of age. Presumably because of this decline in learning ability, little change of interests is found after the age of fifty. Indeed, as people approach old age they tend to develop a pronounced dislike for any change. Fortunately the ability to retain old learning shows less decline with age than the capacity for acquiring new learning.

It is comforting for oldsters to know that judgment and reasoning ability are often excellent at a ripe old age. In point of fact, age often improves the strategy of tackling problems. Consequently the older professional man can often more than hold his own in competition with young people.

Creative thinking is one of our highest intellectual endowments. It is generally considered to reach its acme in middle age. Lehman, who has done considerable work in this field, finds that in medicine and philosophy the peak occurs at ages 35 to 39. His general conclusion is, however, that individuals may think creatively at practically every chronological age level beyond early youth.

It is indeed heartening, and particularly to those who perform creative work, to read that creative imagination is timeless. To be sure, many people as they grow older would be quite

content if assurance could be given them that their judgment and reasoning abilities would not noticeably deteriorate. On the other hand, many well trained and educated people, however grateful for the preservation of these important abilities, would feel that this is not enough; they dread to think of the time when their creative imagination is appreciably lessened or perhaps lost entirely. They regard a lively imagination as a divine gift to man, and rightly so, for, after all, this world needs new and worthwhile ideas. In this connection one is reminded of the bishop who was offering a prayer at the commencement exercises of a great university. He prayed most earnestly and among other things said, "Oh, Lord, give us power, power, power." The chancellor of the university who sat directly behind him, and a man who unquestionably understood values, pulled on the bishop's gown and said in an undertone, "Not power, Bishop, but ideas, ideas."

AUXILIARY READY

As usual, the Woman's Auxiliary to the West Virginia State Medical Association through its president, Mrs. F. Carl Chandler, of Bridgeport, and its convention chairman, Mrs. E. J. Humphrey, of Huntington, has arranged a most interesting program for the 24th Annual Meeting at Huntington, May 10-12.

One of the highlights of the convention will be the appearance, as guest speakers, of Mrs. Eustace A. Allen, president of the Woman's Auxiliary to the American Medical Association, and Mrs. Olin Sanford Cofer, president of the Auxiliary to the Southern Medical Association. In addition, the presidents and presidents elect of the auxiliaries of neighboring states have been invited to be present.

Mrs. F. Carl Chandler, the retiring president, has worked hard for the success of the Auxiliary during her term of office, and much praise is due her for the healthful condition of the organization at this time. Many new members have been added to the state roster during the past year, and two new auxiliaries organized.

For the first time in several years, there will be a full three-day meeting. The executive committee of the Woman's Coordinating Board at Milton Hospital has provided an interesting sidelight in the way of a luncheon at the hospital on the first day of the meeting.

Members of the Auxiliary are attending these annual meetings in greater numbers than at any time in the history of the organization, and the year 1948 will probably prove to be no exception.

SCIENTIFIC EXHIBITS

Dr. Hu C. Myers and the other two members of the committee on scientific exhibits, Dr. Chauncey B. Wright, of Huntington, and Dr. M. L. Hobbs, of Morgantown, have arranged an interesting scientific exhibit for the annual meeting at Huntington. Booths in the Bridge Room at the Hotel Prichard will house the exhibits, with wall displays being placed on the mezzanine.

The list of the exhibits and exhibitors is printed elsewhere in this issue of The Journal. We hope that all members who attend the general sessions will also visit the scientific exhibits sometime during the three-day meeting.

A great deal of time has been required to arrange these interesting exhibits and the committee and those responsible for bringing them to Huntington will no doubt find that their efforts to provide an educational and informative display are appreciated by our members.

A PERSONAL APPEAL

It is unfortunately true that the thirty-five technical exhibits booked for the annual meeting at Huntington will have to be separated from the place where general sessions will be held. No other arrangements could be made, and the Program Committee had but two choices, i.e., separate the exhibits and the general sessions, or dispense with them entirely for 1948. The committee decided to invite exhibitors to meet with us as usual.

While the arrangement is not to the liking of any of the parties concerned, a very splendid spirit has been shown by all exhibitors in booking space. All exhibit spaces were sold in less than a week after the floor plan was opened.

The exhibitors are coming to Huntington with most interesting displays, and we appeal to our members generally to take the time necessary to visit all of the exhibits, which will be set up on the mezzanine and in the ballroom at the Hotel Governor Cabell. Our exhibitors deserve this consideration, and we feel that the registration at the various booths will prove to be satisfactory.

FIGHTING SOCIALIZED MEDICINE

In mid-February, the doctors of England went on record in overwhelming opposition to the Labor government's socialized medicine law which is to go into effect July 5. The vote was 25,340 to 4,084. According to an AP dispatch from London, a doctor's strike against the measure is considered almost certain.

The doctors, who certainly have a far broader understanding of the public health problem than the politicians in power, are not just stubbornly fighting any change in British health practices. They are opposing various provisions of the law which they believe are unjust, and which would lead to the deterioration of medical standards. One of these provisions would forbid the old, established right to buy and sell practices—which would mean that a doctor who wishes to retire or move could not obtain any payment for a valuable property he had built up through industry and ability. They oppose a second provision which would establish a small, basic state-paid salary—which the doctors believe would be the entering wedge for a full-salaried state medical service. A third provision would bar a doctor from appealing to the courts from dismissal by the state service—which would certainly rob the medical profession of a fundamental right.

This turmoil over state medicine in England is of importance to this country, where proposals are being made looking toward eventual socialization and political domination of the healing arts. The British doctors realize that when the state steps into anything, it eventually takes over completely. And that would happen here too.—Clarksburg Telegram.

PSYCHOSOMATIC MEDICINE

The old country doctor and family physician practiced psychosomatic medicine without giving any academic title to their method of therapy, and did this successfully for the most part. Their sympathetic understanding and knowledge of an individual's background were great assets. It is easily understood how impersonal and exact findings by the laboratory, the x-ray, the electrocardiograph and many other modalities of study could never measure the degree of anxiety, fear, or frustration that the patient might possess.

Many clinicians have made a diagnosis of psychoneurosis in a patient who has already gone through the gamut of scientific study without any demonstrable disease, altered chemical or physiologic activity. At this point the patient was faced with two alternatives, depending upon the acumen of the physician—a life of psychologic invalidism or one of normalcy.

So great is the need for understanding the psyche with its influence on the soma that no practicing physician, irrespective of his specialty, can ignore this phase of medicine and feel that he is doing a thorough piece of work. It is not enough to make a diagnosis of a neurosis by exclusion alone, but in addition one must be able to recognize its characteristic features. Then, again, there are those who accept the principles of psychosomatic medicine so enthusiastically that there is danger of the pendulum swinging too far in this direction, that is, of trying to interpret all symptoms on an emotional basis. Thus, in order to prevent a distorted concept of the patient in question, the need for intelligent thinking and evaluation is very great.—Pennsylvania Medical Journal.

General News

STATE MEDICAL ASSOCIATION READY FOR ANNUAL MEETING AT HUNTINGTON

The lack of hotel rooms at Huntington hotels for the 81st Annual Meeting of the West Virginia State Medical Association, May 10-12, is all that stands in the way of a new record for attendance. Judged from the requests for reservations that have come from every part of the state, the program this year is apparently of more interest to doctors generally than any program arranged for a previous annual meeting.

While the hotels at Huntington have been booked to capacity for several weeks, the housing committee, under the chairmanship of Dr. James R. Brown, is

Thomas Bess, M. D., President

doing splendid work in finding accomodations for visiting doctors and their wives.

Several of the members of the State Medical Association have already booked reservation at hotels in Ashland, Kentucky, and they will commute to Huntington for the meeting. Many Charleston doctors will commute to the meeting, and several from other parts of the state will no doubt engage rooms at Charleston hotels, as there is convenient and satisfactory train service between the two cities.

The Program

The program, which is printed in this issue of The Journal, includes papers by prominent doctors from over the country. For the most part, medicine will be stressed at the Tuesday meeting, and surgery at the sessions on Wednesday. Other specialties will be represented on the Monday program.

After the usual Sunday meetings of the Council and Association committees, the State Medical Association and Auxiliary will entertain at an open house at the Hotel Prichard at nine o'clock. All doctors and their wives are invited to be present.

The convention will get under way Monday morning promptly at 9:30 o'clock, with Dr. Thomas Bess, of Keyser, the president, presiding. The first scientific session will begin at 10:15 o'clock.

The annual address of the president, Dr. Thomas Bess, will feature the Monday evening program. His subject is, "West Virginia is Ready for a Four-Year Medical School." Mrs. F. Carl Chandler, president of the Auxiliary, will be presented at this meeting.

Dr. George F. Lull, secretary and general manager of the American Medical Association, will speak on "Trends in Medical Service" at the meeting on Tuesday evening.

House of Delegates

The first meeting of the House of Delegates will be held in the ballroom at the Hotel Prichard, Monday afternoon, at 4:30 o'clock. Officers will be elected at the second session, which is scheduled for Tuesday at 4:30 P. M.

Banquet Wednesday Evening

The annual banquet, which is an informal affair, will be held at the Hotel Prichard, Wednesday evening, at seven o'clock, with Dr. Thomas L. Harris, of Parkersburg, as toastmaster. The guest speaker will be Dr. Irvin Stewart, Ph.D., president of West Virginia University. His subject is, "West Virginia University and Medical Education in West Virginia."

Mrs. F. Carl Chandler, President

Following Doctor Stewart's address, a floor show will be presented through the courtesy of the Medical Arts Supply Company, of Huntington. Music for the occasion will be provided through the courtesy of the Cabell County Medical Society.

Roundtable Breakfasts

Many breakfasts, luncheons, and dinners have been arranged. Roundtable breakfasts on interesting subjects are scheduled for the first time at an annual meeting. The program arranged for these roundtable affairs are on subjects of great interest to the members. If there is a satisfactory attendance this year, it is probable that additional breakfasts will be arranged for future programs. All roundtable breakfasts will be held at the Hotel Prichard, and will be served promptly at eight o'clock, so as to provide ample time for discussion.

"Tuberculosis Control in Industry" will be the topic at the first roundtable breakfast on Tuesday morning. It will be sponsored jointly by the Section on Industrial Health and the Committee on Tuberculosis.

Two roundtable breakfasts have been arranged for Wednesday morning, one on rheumatic fever, and the other on neurosurgery. Dr. Frank V. Langfitt, of Clarksburg, will be the moderator at the breakfast on rheumatic fever, which is being sponsored by the West Virginia Heart Association, the Section on Internal Medicine, and the West Virginia Chapter of American College of Physicians. Dr. J. Edwin Wood, of Charlottsville, and Dr. Perrin H. Long, of Baltimore, will be the guest speakers.

The second breakfast that morning is being sponsored by the Section on Surgery. The topic for discussion will be problems of neurosurgery, with Dr. Frank M. Turney, of Brooklyn and Dr. Fred W. Rankin, of Lexington, as the guest speakers.

Full information concerning all of the breakfasts, luncheons, and dinners is printed in this isue of The Journal.

Special Luncheon Speaker

Charles E. Iliff, Jr., M. D., of Baltimore, will be the special guest speaker at the annual luncheon of the West Virginia Academy of Ophthalmology and Otolaryngology, which will be held at the Hotel Prichard, Monday, at 12:30 P. M. His topic will be, "The Use of Beta Irradiation in Ophthalmology."

Scientific Exhibits

The Bridge Room on the mezzanine at the Hotel Prichard will be used for scientific exhibits. The displays are unusually good and will be under the supervision of the Committee on Scientific Exhibit, composed of Dr. Hu C. Myers, of Philippi, chairman, and Drs. Chauncey B. Wright, of Huntington, and Melford L. Hobbs, of Morgantown.

Technical Exhibits

Due to lack of adequate space, it has been impossible to arrange the display of technical exhibits at the Hotel Prichard. All of these exhibits will be set up on the mezzanine and in the ballroom at the Hotel Governor

Cabell, and all members of the State Medical Association are urged to visit the exhibits frequently during the meeting. Every inch of available space at the Hotel Governor Cabell is being used for technical exhibits, and the display will undoubtedly be the best ever presented at a medical meeting in West Virginia.

Woman's Auxiliary

All functions of the Woman's Auxiliary will be held at the Hotel Frederick, including the two luncheons. The complete program is printed in this issue of The Journal.

One of the features of the meeting will be the luncheon on Monday at Milton Memorial Hospital for Crippled Children, at Milton. Members of the Auxiliary will be the guests of the Executive Committee of the Woman's Coordinating Board to the Hospital.

The following is the list of auxiliary convention chairmen: Credentials and registration, Mrs. H. E. Beard; reservations, Mrs. James S. Klumpp; publicity, Mrs. Gates Wayburn; decorations, Mrs. Dorsey Ketchum and Mrs. Harlan Stiles; past presidents' breakfast, Mrs. D. E. Greeneltch and Mrs. W. C. Swann; executive board dinner, Mrs. E. J. Humphrey; Tuesday luncheon, Mrs. A. G. Rutherford; Wednesday luncheon, Mrs. J. Russell Cook.

Golf and Tennis Tournaments

Golf and tennis tournaments have been arranged for the meeting. Dr. James S. Klumpp, West Virginia Building, Huntington, is chairman of the golf committee, and entries with club handicap should be mailed to him without delay.

Dr. William B. MacCracken, 1139 Fourth Avenue, Huntington, is chairman of the tennis committee, and entries should be mailed directly to him. The golf tournament will be held Monday, Tuesday, and Wednesday during the annual meeting, and the tennis tournament will probably be held Sunday afternoon, at the Guyan Country Club.

In addition to distinguished guest speakers, the convention will be attended by doctors located in cities in Kentucky, Virginia, and Eastern Ohio.

PEDIATRIC CONSULTANT NAMED

Dr. Helen M. Belknap, of St. Albans, has been appointed by N. H. Dyer, M. D., state health commissioner, as pediatric consultant to the division of maternal and child health.

Doctor Belknap has been assisting in the work of well-baby conferences in Kanawha county. As pediatric consultant, she will help coordinate the state health department's school health program with a similar program sponsored by the state department of education.

Dr. Henrietta L. Marquis, of Charleston, is also serving as pediatric consultant to the division of maternal child health, having been appointed to this position by Doctor Dyer several months ago.

MORGANTOWN DOCTORS CERTIFIED

Dr. Dorsey Brannon, and Dr. Glenn Ashworth, both of Morgantown, have been certified as Diplomates of the American Board of Surgery.

MINIMUM REQUIREMENTS FOR HOSPITALS SET UNDER NEW LAW EFFECTIVE JULY 1

The organization meeting of the hospital licensing advisory board was held at Charleston, March 31. Dr. Hu C. Myers, of Philippi, was elected chairman, Mr. Charles Warner, of Charleston, vice chairman, and Sister Mary Carola, of Huntington, secretary. The other members of the board present were Mr. James L. Foster, of Bluefield, Mr. J. Stanley Turk, of Wheeling, and Dr. C. R. Adams, of Charleston. Mr. John S. Alfriend, of Charles Town, another member of the board, was unable to attend the meetinig.

The new hospital licensing law is effective July 1, 1948. Under the provisions of the act, the state health department is empowered to license "any institution in which an accommodation of five or more beds is maintained for the hospitalization of the sick or injured or care of any persons requiring or receiving chronic or convalescent care."

Institutions to be licensed are general hospitals, tuberculosis hospitals, mental institutions, chronic disease hospitals, maternity hospitals, specialized hospitals, such as orthopedic, pediatric, rest homes, nursing homes, and homes for alcoholics.

The regulations promulgated by the state health department for the licensing of hospitals was approved by the board. The regulations, standards and requirements for hospitals were formulated by Dr. N. H. Dyer, state health commissioner, and members of his staff after a careful study of existing conditions in the state.

Emphasis has been placed on fire prevention, and certification by the state fire marshal concerning the safety of the building is required. Various phases of the operation of a hospital are covered, including sanitation, ventilation and facilities essential for services provided. Medical supervision is one of the requirements for the operation of such an institution.

The hospital licensing act passed by the legislature at the regular session in 1947 provides a schedule of fees for licenses. Penalties are also provided for failure to obtain a license or for non-compliance with the minimum standards and requiremenst. The new regulations are now being printed for distribution to interested persons.

Mrs. Mary F. Fordham has been named by Dr. N. H. Dyer as assistant director of the new bureau that has been set up under the act. Applications for license to conduct a hospital should be mailed to the Bureau of Hospitals and Medical Care, State Health Department, the Capitol, Charleston 5, West Virginia. Application forms will be sent upon request.

Field representatives of the bureau will inspect hospitals just as soon as possible after the receipt of applications.

DR. R. J. WILKINSON HONORED

Dr. R. J. Wilkinson, of Huntington, was named president elect of the Southeastern Surgical Congress at the annual meeting held in Hollywood, Florida, early in April. He will succeed Gilbert F. Douglas, M. D., of Birmingham, Alabama, whose term will expire in 1949.

CONVENTION COMMITTEES

Scientific Work

Russell B. Bailey, Chairman
W. W. Point
George F. Evans

Scientific Exhibit

Hu C. Myers, Chairman
C. B. Wright
Melford L. Hobbs

Housing

James R. Brown, Chairman
Virgil Chambers
Leo E. Christian
C. Stafford Clay
Clarence Boso
Robert S. Barrett
Gilbert Ratcliff
R. J. Stevens

Entertainment

E. J. Humphrey, Chairman
James S. Klumpp
Ray M. Bobbitt
W. Byrd Hunter
I. Ewen Taylor
Dorsey Ketchum
Robert W. Coplin
Oscar B. Biern

SOUTHERN PEDIATRIC SEMINAR

The 28th annual session of the Southern Pediatric Seminar will be held July 5-17, at Saluda, North Carolina. The theme for this postgraduate course is devoted to "Better Babies in the South." The course is designed primarily to fit the needs of general practioners, and the lectures will stress the solution of ordinary daily problems in the most modern and satisfactory way.

The program will include lectures by some of the outstanding pediatrists in the south. Most universities in the southern part of the country will be represented in the faculty. Members of the faculty and guest lecturers are serving without compensation, and at their own expense.

Accomodations may be secured by communicating with the secretary-treasurer, who will provide ample room for all doctors who attend the seminar. Advance registration is requested.

Further information may be obtained by addressing Mr. M. A. Owings, secretary-treasurer, Saluda, North Carolina.

NEW VA FEE SCHEDULE APPROVED

The revised fee schedule agreed to by the Veterans Administration and the West Virginia State Medical Association, became effective April 1. The fee schedule was negotiated by the veterans board of review, composed of Dr. James R. Brown, of Huntington, and Drs. Claude B. Smith and Paul H. Revercomb, of Charleston. Copies of the schedule and agreement signed by the Veterans Administration and Dr. Thomas Bess, president of the State Medical Association, have been mailed to the more than nine hundred members who are participating in the program.

The program provides continued "home town" medical care for veterans living in all parts of West Virginia. The schedule has been expanded to include many additional service-connected and service-aggravated disabilities for which treatment may be given by local doctors.

CONFERENCE ON INDUSTRIAL MEDICINE

Over sixty doctors and nurses engaged in industrial practice in West Virginia attended the conference at the Hotel Ruffner, in Charleston, April 11, arranged by the industrial committee of the Kanawha Medical Society, of which E. Bennette Henson, M. D., is chairman.

J. Huber Wagner, M. D., chief surgeon for the United States Steel Corporation, met with members of the American College of Surgeons at noon, and presented a paper at the afternoon session. His subject was, "Treatment of Wounds and Compound Fractures."

Papers were presented by the following Charleston doctors: Ralph S. McLaughlin, Hunter M. Boggs, T. P. Mantz, Walter G. J. Putschar, H. M. Hills, Jr., Bert Bradford, Jr., and H. M. Escue.

Following the presentation of papers at the afternoon session, there was a panel discussion, led by Doctor Henson.

VA OFFERS SPECIALTY BOARD TRAINING

The Veterans Administration has announced a program whereby young West Virginia physicians who have finished residency training may now complete the requirements for their specialty board examinations through supervised practice as full-time staff members in VA hospitals. Initial salaries range from $4,149 to $7,102 per annum. There are openings at the present time at the VA Hospital at Huntington, and the Newton D. Baker VA Center at Martinsburg.

To qualify for a position under this program, a physician must have completed three years of residency training in medicine, surgery or neuropsychiatry at an approved institution. These posts have been available heretofore to men finishing courses at VA hospitals but are being offered for the first time to those trained in other institutions.

Although the VA hospitals in West Virginia are not located in the same towns with medical schools, the staffs include outstanding consultants in many specialties, and these consultants will give advice and guidance to the younger doctors working toward board certification in their respective fields.

Detailed information may be obtained by addressing the Branch Medical Director, Veterans Administration, 900 N. Lombardy Street, Richmond 20, Virginia.

1948 AMERICAN MOTHER NOMINATION GOES TO WIDOW OF PHILIPPI DOCTOR

Mrs. J. M. Myers, of Philippi, widow of the late J. M. Myers, M. D., of that city, has been selected as West Virginia's candidate for the American Mother of 1948. The announcement of the selection has been made by Mrs. Dale Thomas, of Charleston, chairman of the state selection committee named by Governor Clarence W. Meadows.

The nomination of Mrs. Myers has been forwarded to a national group of judges representing the American Mother's Committee of the Golden Rule Foundation, with headquarters in New York City. The winner will be announced about May 1. She was named for this honor by the West Virginia committee from a large number of candidates whose names were submitted by various clubs, individuals, and other groups.

Mrs. Myers, the former Lannie Crim Johnson, was born in Barbour county. She attended elementary and "select" schools in that county, and taught school for three years prior to her marriage. She is the mother of five children, all of whom are practicing physicians in West Virginia. Four are operating the Myers Clinic Hospital at Philippi. They are: Hu C. Myers, surgeon; Karl J. Myers, radiologist; Elmer E. Myers, pathologist; and Edna Myers Jeffreys, obstetrician and gynecologist. Another son, J. W. Myers, Jr., is practicing his specialty of ophthalmology in Wheeling.

The clinic at Philippi was established by Drs. Hu C. Myers, Karl J. Myers and J. W. Myers, Jr., in 1934, just a few months before the death of their father.

Mrs. Myers studied medicine for a short time, and then assisted her late husband in founding a drug company (Modern Drug, Inc.), with headquarters in Philippi. At the present time she is actively engaged as manager and president of the company, and she is also a director and vice president of the First National Bank of Philippi.

DR. HOLROYD ON "GRASS ROOTS" PROGRAM

Dr. Frank J. Holroyd, of Princeton, will present a paper before the annual meeting of the National Conference of County Medical Society Officers ("Grass Roots"), at the Palmer House, in Chicago, June 20, immediately preceding the opening of the annual meeting of the American Medical Association. His subject is, "The County Medical Society—Its Part in Medical Organization."

The speaker has been asked to discuss the county medical society's relation to the state medical association, the American Medical Association, and other medical organizations.

Doctor Holroyd has served as state and regional chairman of the Conference since its organization early in 1947.

NURSING SCHOLARSHIPS

The Chicago chapter of the American Red Cross is the first to award nursing scholarships. Scholarships that provide expenses and tuition on a three-year basis have been awarded to four Illinois girls.—R. N.

VITAL STATISTICS REPORT

Births in February, 1948, reported to the state department of health, increased 751 over January, for a total of 3,428. Deaths reported showed an increase of 91 over the preceding month. It is thought that these increases are probably do to inadequate reporting in January rather than to an actual increase.

Deaths from heart diseases showed a decided increase, 409 being reported to the division of vital statistics in February, as against 71 in January.

Measles took a heavy toll of children in February, nine deaths being reported for that month, as against but 19 deaths from this cause during the entire year 1947.

Dr. N. H. Dyer, state health commissioner, has urged that special attention be given to the use of gamma globulin to combat measles, inasmuch as the incidence has shown a decided increase during the present year. The serum is available for state-wide distribution by the state health department under an agreement with the American Red Cross. Distribution is being made in limited quantities, without charge, through the State Hygienic Laboratory.

The serum is being distributed subject to the following proviso: "It must be used for measles only; it must be distributed without charge to physicians, hospitals and clinics in accordance with applicable laws and regulations; and it must be administered in accordance with established standards and without any charge to the patient for the product."

Doctor Dyer has pointed out that requests for a supply of the immune globulin should be submitted through the local county health department. In areas where there is no such service, requests from doctors should be sent directly to the State Hygienic Laboratory, in Charleston.

DIET CARDS AVAILABLE

The Nutrition Service of the division of maternal and child health, state health department, has prepared for the use of physicians a series of seven diet cards for infants through the first month to two years and older. Card No. 1 covers the infant feeding schedule and deals with food for the lactating woman, stressing the importance of breast feeding. The other cards deal with infant feeding schedules and directions for cooking or preparing food for infants.

In addition to the cards, two pamphlets have been printed with reference to prenatal care. They concern diet for the expectant mother.

All doctors may obtain a supply of the cards and pamphlets by addressing Nutrition Service, Division of Maternal and Child Health, State Department of Health, Charleston.

VISIT THE EXHIBITS

Scientific — Hotel Prichard

Technical — Governor Cabell

DR. R. R. SAYERS HEADS LIST OF SPEAKERS FOR HEALTH CONFERENCE

Dr. R. R. Sayers, of Washington, D. C., Chairman of the Medical Board, United Mine Workers of America Welfare and Retirement Fund, will be one of the guest speakers at the annual meeting of the West Virginia State Health Conference, May 27-28, at the Hotel Prichard, in Huntington. His address is scheduled for Thursday, May 28, and his subject will be, "The Program of the United Mine Workers Health and Welfare Fund."

The first session will get under way Thursday at 9:00 A.M., with Dr. N. H. Dyer, state health commissioner, presiding.

Dr. Robert Koopman, Ph.D., of Lansing, Michigan, who is connected with the Department of Public Instruction in that state, will appear on the program with Doctor Sayers. He will speak on the subject of "School Health Services." The final paper of the morning will be presented by Dr. Roscoe P. Kandle, of New York City, field director of the American Public Health Association, who has been assigned the subject, "Health Survey in West Virginia."

Dr. Walter E. Vest, of Huntington, president of the public health council, will preside at the Friday morning session, which is scheduled to begin at 9:30 o'clock. The following program has been arranged for this session:

Felix J. Underwood, M.D., Executive Officer, Mississippi State Board of Health, Jackson, Mississippi —"Problems of Improving the Supply of Professional Personnel."

Miss Donna Pearce, Sr. Nurse Officer Reserve, District 2, USPHS, Richmond, Virginia,—"The Newer Trends in Public Health Nursing in the Total Health Program."

Dean Roberts, M.D., Chief of the Bureau of Medical Services, Maryland State Department of Health, Baltimore,—"The Control of Chronic Diseases."

Mr. Elton D. Woolpert, Assistant to the Surgeon General, USPHS, Washington, D. C.,—"Current National Health Legislation."

The annual business session of the West Virginia Public Health Association will be held following the scientific program on Thursday morning, May 27, and the Association dinner is scheduled for seven o'clock, May 28, at the Hotel Prichard.

VISIT THE EXHIBITS

Scientific — Hotel Prichard

Technical — Governor Cabell

OPEN DAILY, 9 TO 5

RELOCATIONS

Dr. J. W. Newman, of Lillybrook, has moved to Pemberton, where he will continue in industrial practice.

* * * *

Dr. W. V. Wilkerson, of Prenter, will move to Highcoal the first of May, where he will continue in industrial practice there and at Ferndale.

* * * *

Dr. Maurice J. Small, of Parsons, has moved to New York City and assumed his new duties as a member of the staff of Halloran Hospital, Staten Island.

* * * *

Dr. J. W. Myers, formerly of Philippi, who moved to Wheeling in January, has offices at 720 Central Union Building, where he is engaged in the practice of his specialty of ophthalmology.

* * * *

Dr. Robert E. Carr, of Elbert, has accepted appointment as a member of the surgical staff at the Veterans Administration Hospital, in Richmond.

* * * *

Dr. James A. Farley, of Delbarton, has accepted a one-year residency in internal medicine at the Veterans Administration Hospital in New Orleans, effective July 1.

TRAINING THE GENERAL PRACTITIONER

In order to establish a program of health that can eventually reach all the people, the general practitioner is an essential member. Medical education must recognize the importance of his function in the overall program and design his training to include not only the science but the art of practice. It is important that the general practitioner be liberally trained in medicine, pediatrics, obstetrics and minor surgery; that he be trained to recognize his limitations; and that he have access to continuation courses to keep abreast of the new developments in medicine.

The physician should have adequate training in psychology and sociology that his management of medical problems should not fall short of comprehensive advice to the patient in all things which disturb his welfare. He should be skilled in teamwork in order to work effectively both with his colleagues and with public and private agencies concerned with the patient's welfare.—H. E. Thelander, M. D., in California Medicine.

ANESTHESIOLOGY GROWS UP

In 1937 the American Board of Anesthesiology, Inc., was formed. At that time there were thirteen hospitals approved for residency in anesthesia and twenty-nine residents. In 1947, just ten years after the Board was formed, there were one hundred and thirty-one hospitals approved and four hundred and twenty-nine residents. Ten times as many approved hospitals and fourteen times as many residents is a good record for ten years and definitely indicates that the infant specialty is no longer an infant. This improvement in teaching facilities for the physician anesthetist is probably the most important recent advance in anesthesia.—Lois L. Wells, M. D., in J. Am. Medical Women's Ass'n.

CONVENTION PROGRAM

81st Annual Meeting

of the

West Virginia State Medical Association

HOTEL PRICHARD, HUNTINGTON

May 10-12, 1948

SUNDAY MORNING
May 9

8:30—Meeting of the Publication Committee, Hotel Prichard. Walter E. Vest, M.D., *presiding.*

★

SUNDAY AFTERNOON

12:00—Pre-convention meeting of the Council, Hotel Prichard. Wade H. St. Clair, M.D., *presiding.*

2:00—Registration, Mezzanine, Hotel Governor Cabell.

3:30—Meeting of the Committee on Maternal Health, Hotel Prichard. Elizabeth McFetridge, M.D., *presiding.*

3:30—Meeting of the Committee on Mental Hygiene, Hotel Prichard. O. B. Biern, M.D., *presiding.*

★

SUNDAY EVENING

6:00—Past Presidents' Dinner, Hotel Prichard. Hosts, Wade H. St. Clair, M.D., and R. O. Rogers, M.D., Bluefield.

9:00—Open House, Hotel Prichard—West Virginia State Medical Association and the Woman's Auxiliary.

MONDAY MORNING
May 10

OPENING EXERCISES

9:30—Call to Order—Thomas Bess, M.D., President, Keyser.

Invocation—The Rev. S. Roger Tyler, D.D., Rector, Trinity Episcopal Church, Huntington.

Address of Welcome—C. A. Hoffman, M.D., President, Cabell County Medical Society.

Response—R. W. Love, M.D., Moorefield.

SCIENTIFIC PROGRAM

Presiding: Harold Van Hoose, M.D.

10:15—"Dermatoses of Allergic Etiology."—J. Warwick Thomas, M.D., Richmond, Virginia.

Discussion will include conditions or diseases of the skin in which allergy is of etiologic importance. The main points of differential diagnosis, investigation and management will be outlined. (Lantern slides).

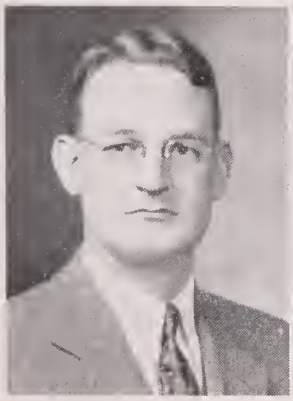
(E. C. Hartman, M.D. will introduce the speaker.)

11:00—"Some Practical Considerations in the Use of Chemotherapy and Antibiotics in the Treatment of Upper Respiratory Infections. Latent Mastoid Infections Following Their Use."—Henry M. Goodyear, M.D., Cincinnati.

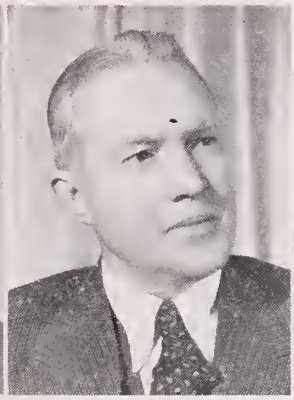
The use and abuse of antibiotics with consideration of their increased efficiency in the presence of temperature and inflamed meninges.

(Sobisca S. Hall, M.D., will introduce the speaker.)

CONVENTION SPEAKERS

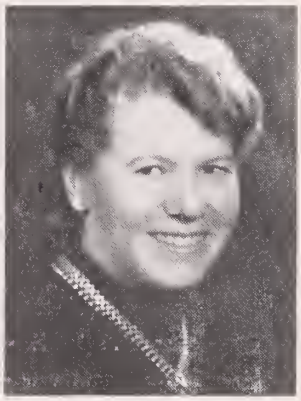


J. Warrick Thomas, M. D.



Henry M. Goodyear, M. D.

J. S. Felton, M. D.



Sophia J. Kleegman, M. D.

11:45—Recess for visiting exhibits.
Section and Society Luncheons at twelve-thirty.

MONDAY AFTERNOON

Presiding: Elizabeth McFetridge, M.D.

2:00—"Streptomycin in the Treatment of Tuberculosis in Man—Experience of the Veterans Administration."—John B. Barnwell, M.D., Washington, D. C.

Results of use of streptomycin in 2500 cases of tuberculosis, pulmonary and extra pulmonary, as therapy and as prophylaxis in thoracic surgery (Lantern slides).

(George F. Evans, M.D., will introduce the speaker.)

2:45—"Industrial Medicine Comes of Age."—Jean Spencer Felton, M. D., Oak Ridge, Tennessee.

Specific procedures have been developed in industry allowing full realization of preventive medicine. These include selective placement, case finding procedures, a betterment and understanding of human relations among workers and employers, medical rehabilitation, and a recognition of the human factor in occupational injuries. Industrial medicine has assumed a specialty level through development of a specialized literature and establishment of residencies and fellowships.

(J. L. Patterson, M.D., will introduce the speaker.)

3:30—"Diagnosis and Treatment of Infertility in Women."—Sophia J. Kleegman, M.D., New York, N. Y.

Diagnostic examinations and tests, details of techniques, and interpretations of results. Treatment will be outlined. Endocrine regime for indicated cases, and indications for surgery will be discussed. The surgical technique developed at Bellevue Hospital for reconstruction of closed tubes will be presented in detail.

(W. W. Point, M.D., will introduce the speaker.)

4:30—First Meeting of the House of Delegates.

MONDAY EVENING

Presiding: Spencer L. Bivens, M.D.

8:30—Address of the President: "West Virginia is Ready for a Four-Year Medical School."—Thomas Bess, M.D., Keyser.

9:00—Introduction of Mrs. F. Carl Chandler, Bridgeport, President of the Woman's Auxiliary to the West Virginia State Medical Association.

TUESDAY MORNING
May 11

Presiding: James S. Klumpp, M.D.

9:30—Oration in Medicine: "Medical Potpourri."—L. Rush Lambert, M.D., Fairmont, West Virginia.

Some of the general problems of medical practice including medical education, standards for qualifications in the specialties, medical research, and a discussion of the degenerative diseases and their relation to nutrition.

(Thomas Bess, M.D., will introduce the speaker.)

10:15—"The Natural History and Treatment of Infectious Hepatitis."—Perrin H. Long, M.D., Baltimore, Maryland.

(George F. Evans, M.D., will introduce the speaker).

11:00—"The Management of the Menopause With Psychosomatic Aspects."—Emil Novak, M.D., Baltimore, Maryland.

(Oscar B. Biern, M.D., will introduce the speaker).

11:45—Recess for visiting exhibits.
Section and Society Luncheons at twelve-thirty.

TUESDAY AFTERNOON

Presiding: T. Maxfield Barber, M.D.

2:00—"Pneumonia in Infants and Children."—Francis F. Schwentker, M.D., Baltimore, Maryland.

Two basic mechanisms produce the respiratory symptoms in pulmonary infections in children. It is important that the predominating mechanism in each case be recognized since treatment differs. Methods of recognition and treatment will be discussed.

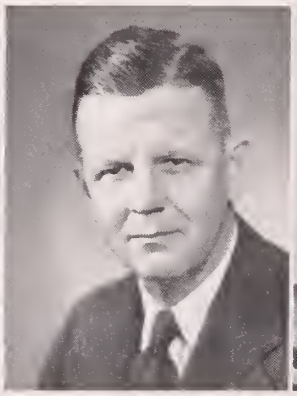
(Harry E. Baldock, M.D., will introduce the speaker.)

2:45—"The Use of Low Sodium Diets in the Treatment of Hypertension."—J. Edwin Wood, Jr., M.D., Charlottesville, Virginia.

The discussion will embrace the nature of the low sodium diet, the probable mechanisms involved in the apparently successful instances of blood pressure re-

CONVENTION SPEAKERS

L. R. Lambert, M. D.



Perrin H. Long, M. D.

Emil Novak, M. D.

Francis F. Schwentker, M. D.

duction and the probable reasons for failure in other cases. (Lantern slides).

(Fred R. Whittlesey, M.D., will introduce the speaker.)

3:30—"Gout."—Russell L. Haden, M.D., Cleveland, Ohio.

Gout is the most commonly overlooked diagnosis with consideration of joint disease. The clinical picture is varied. The characteristic history is an acute, very painful arthritis of acute onset with a complete return of the joints to normal between attacks. In many patients the findings are very atypical. The diagnosis and treatment will be discussed.

(W. M. Sheppe, M.D., will introduce the speaker.)

4:30—Second session of the House of Delegates.

TUESDAY EVENING

Presiding: Thomas Bess, M.D.

8:30—"Trends in Medical Service."—George F. Lull, M.D., Secretary and General Manager, American Medical Association, Chicago, Illinois.

WEDNESDAY MORNING
May 12

Presiding: Russell B. Bailey, M.D.

9:30—"An Evaluation of Antiseptic Drugs and Antibiotics in the Treatment of Infections of the Urinary Tract."—Austin I. Dodson, M.D., Richmond, Virginia.

During the past decade, several chemical and antibiotic preparations have been developed. Early reports attributed magic powers to some of these remedies. The indiscriminate use of these remedies has proved disappointing in many instances. A careful evaluation of individual indications for therapy has been of value in our experience.

(Richard D. Gill, M.D., will introduce the speaker.)

10:15—"Herniation of Intervertebral Discs in the Cervical Region."—M. Frank Turney, M.D., Brooklyn, N. Y.

Because of the relative infrequency of the occurence of herniation of a part of an intervertebral disc in the cervical region, this syndrome is not as generally recognized as the comparable pathological lesion in the lumbar area. The purpose of this presentation is to try to differentiate the syndromes as they relate to lesions of the fifth, sixth and seventh cervical nerves, respectively, thereby making for the simplification of surgical therapy.

(Russell B. Bailey, M.D., will introduce the speaker.)

11:00—"Modern Trends in the Surgical Treatment of Cancer of the Lower Gastro-Intestinal Tract."—Fred W. Rankin, M.D., Lexington, Kentucky.

A prolongation of the preliminary preparatory period of decompression and rehabilitation; the more liberal use of whole blood plus vitamins and chemotherapeutic agents, both before and after operation; single stage operations in both the colon and rectum. Multiple stage operations, however, still have a place in surgery of this portion of the alimentary tract.

(Hugh A. Bailey, M.D., will introduce the speaker.)

11:45—Recess for visiting the exhibits.

Society and Section Luncheons at twelve-thirty.

WEDNESDAY AFTERNOON

Presiding: Thomas Bess, M.D.

2:00—ORATION IN SURGERY: "Surgery in Infancy and Early Childhood."—Bert Bradford, Jr., M.D., Charleston, West Virginia.

More emphasis should be placed upon this branch of surgery. The common surgical diseases are discussed, i. e., hernias, appendicitis, intussusception, pyloric stenosis, and intestinal obstruction due to congenital anomalies. With adequate preoperative treatment and good surgery, infants will tolerate major surgery as well as adults.

2:45—"Carcinoma of the Breast."—J. Stewart Rodman, M.D., Philadelphia, Pa.

Diagnosis, differential diagnosis, and the reasons for adding each step to the radical operation for its cure. (Lantern slides).

WEDNESDAY EVENING

7:00—Annual Banquet, Ballroom, Prichard Hotel—(Informal).

Thomas L. Harris, M.D., Parkersburg, Toastmaster.

"West Virginia University and Medical Education in West Virginia."—Irvin Stewart, Ph.D., President, West Virginia University, Morgantown.

Entertainment—Courtesy, Medical Arts Supply Company, Huntington.

Music—Courtesy, Cabell County Medical Society.

CONVENTION SPEAKERS

J. Edwin Wood, Jr., M. D.

Russell L. Haden, M. D.

George F. Lull, M. D.

Austin I. Dodson, M. D.

CONVENTION SPEAKERS

(Biographical Sketches)

JOHN B. BARNWELL, M. D., Washington, D. C.; Chief, Tuberculosis Service, Veterans Administration, since 1945. Associate Professor of Medicine, University of Michigan, 1935 to 1945. Diplomate, American Board of Internal Medicine. Member: American Clinical and Climatological Association, National Tuberculosis Association, American Trudeau Society (President 1943), American Association for Thoracic Surgery, Joint Committee on Tuberculosis Nursing, National League of Nursing Education, and National Organization for Public Health Nursing, Tuberculosis Society of Venezuela (honorary), Tuberculosis Society of Chile (honorary), and Advisory Committee on Tuberculosis to American Board of Internal Medicine. Author of numerous articles and treatises on tuberculosis.

THOMAS BESS, M. D., Keyser, West Virginia; President of the West Virginia State Medical Association; graduate of West Virginia University, and College of Physicians and Surgeons, Baltimore. Owner and operator of Potomac Valley Hospital, at Keyser. Past Governor of District 178, Rotary International.

BERT BRADFORD, JR., M. D., Charleston, W. Va.; graduated from Washington University, St. Louis, 1935. Resident in Surgery, University Hospital, Cleveland, 1935-1939. U. S. Army, 1941-1945. Colonel, Army Reserve Corps. American Federation of Clinical Research, American College of Surgeons, Southeastern Surgical Congress, American Board of Surgery.

AUSTIN I. DODSON, M. D., Richmond, Va. Professor of Urology at the Medical College of Virginia since 1930. Urologist at St. Elizabeth's Hospital, St. Luke's Hospital, and McGuire Clinic, Richmond. Associate in Urology at the Medical College of Vorginia from 1920 until 1930.

JEAN S. FELTON, M. D., Oak Ridge, Tennessee; Medical director, Oak Ridge National Laboratory, supervising an industrial medical program for 2500 employees in one of the National laboratories under the Atomic Energy Commission. Graduated from Stanford University, 1935. Accepted commission in Army Medical Corps, 1940. Served as Industrial Medical Officer for the San Francisco Port of Embarkation from 1941 to 1945, during which time established and administered a medical care program for 20,000 Federal civilian employees. Discharged 1946, with rank of Lieutenant Colonel. Member: American Association for the Advancement of Science, American Association of Industrial Physicians and Surgeons, American Industrial Hygiene Association, American Public Health Association (Fellow), American Medical Association. Author of numerous articles. Associate Editor, Industrial Medicine.

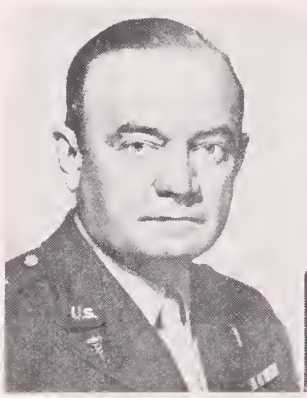
HENRY M. GOODYEAR, M. D., Cincinnati, Ohio; Professor of Otolaryngology, University of Cincinnati, College of Medicine. Director of Otolaryngology, Cincinnati General Hospital, and Children's Hospital. Fellow: American College of Surgeons, American Laryngological Association, American Otological Society. Member of American Academy of Ophthalmology and Otolaryngology. Former Chairman of Nose and Throat Section, Ohio State Medical Association. Former President, Cincinnati Oto-laryngologic Society. Author of some fifty articles read before various societies and published in state and national journals.

RUSSELL L. HADEN, M. D., Cleveland, Ohio; Head of Department of Medicine, Cleveland Clinic, since 1930. Member: American Association of Pathology and Bacteriology, American Society for Clinical Investigation, American Clinical and Climatological Association. Author: Clinical Laboratory Methods, Dental Infection and Systemic Disease, Principles of Hematology. Awarded gold medal by Radiologic Society of America for contributions to dental roentgenology, 1929.

CHARLES E. ILIFF, JR., M. D., Baltimore, Md. Graduated Johns Hopkins University School of Medicine, 1939. Five years in Ophthalmology at Wilmer Clinic, Johns Hopkins. Member American Acadamy of Ophthalmology, and Fellow American College of Surgeons.

SOPHIA J. KLEEGMAN, M. D., New York City; Associate Clinical Professor of Obstetrics and Gynec-

CONVENTION SPEAKERS



Fred W. Ronkin, M. D.

Bert Bradford, Jr., M. D.

J. Stewart Rodman, M. D.

Irvin Stewart, Ph. D.

ology, New York University College of Medicine. Associate Visiting Gynecologist, Bellevue Hospital. Fellow: American College of Surgeons, New York Academy of Medicine. Diplomate, American Board of Obstetrics and Gynecology. Member, American Association of Marriage Counsellors. Private practice restricted to gynecology with particular emphasis on problems of fertility and marriage counselling.

L. RUSH LAMBERT, M. D., Fairmont, W. Va.; graduate Medical College of Virginia. Postgraduate work in cardiology at Harvard, University of Michigan, and University of Minnesota. During World War II served as State Medical Officer, Selective Service, for West Virginia, September, 1940, to April, 1946, being discharged with rank of Colonel.

PERRIN HAMILTON LONG, M. D., Baltimore; Professor of Preventive Medicine, The Johns Hopkins University, and Associate Physician, The Johns Hopkins Hospital, since 1940. Member: A. M. A., Association American Physicians, American Society for Clinical Investigation, Southern Medical Association. Fellow Royal College of Physicians, 1946. Southern Medical Association Research Medal, 1943. Consultant to Secretary of War and Veterans Administration. Member, Committees on Growth, Veterans Medical Problems, National Research Council, Council on Pharmacy and Chemistry, Council on National Emergency Medical Service. World War II, Colonel A. U. S. Croix de Guerre (1918). Legion of Merit (1945). Author of books and scientific papers dealing with infectious agents and diseases and chemotherapy.

GEORGE F. LULL, M. D., Chicago, Ill.; Secretary and General Manager of the American Medical Association. Deputy Surgeon General of the Army with rank of Major General, World War II.

EMIL NOVAK, M. D., Baltimore; Assistant Professor of Gynecology, Johns Hopkins University School of Medicine, Gynecologist-in-chief, Bon Secours, and St. Agnes Hospitals, Baltimore. President, American Gynecological Society. Author of "Textbook of Gynecology," "Gynecological and Obstetrical Pathology," "Menstruation and Its Disorders," and "The Woman Asks The Doctor."

FRED W. RANKIN, M. D., Lexington, Kentucky; Clincial Professor of Surgery, University of Louisville, Louisville, Kentucky, since 1941. Served with the Surgeon General's Office, U. S. Army, as chief consultant in surgery to the U. S. Armies, with rank of Brigadier General, World War II. Fellow: American Surgical Association, Southern Surgical Association (President, 1937), American College of Surgeons, and Southeastern Surgical Congress (President, 1938). President American Medical Association, 1942. One of 13 founders of American Board of Surgery. Author, "Surgery of the Colon." Co-author, contributor to surgical textbooks, and author of numerous papers on clinical surgery and surgical pathology.

J. STEWART RODMAN, M. D., Philadelphia, Pa.; Professor Emeritus of Surgery, Woman's Medical College of Pennsylvania, Philadelphia. Consulting Surgeon to the Bryn Mawr, Presbyterian, and Woman's College hospitals. Secretary and Treasurer, The American Board of Surgery.

FRANCIS F. SCHWENTKER, M. D., Baltimore; Professor of Pediatrics, Johns Hopkins University School of Medicine, and Pediatrician-in-Chief, The Johns Hopkins Hospital, since July 1, 1946. Commander, U. S. Navy Medical Corps, 1942-1946. Consultant to Secretary of War, 1941-1942. Member Rockefeller Health Commission, 1940-1942.

IRVIN STEWART, PH. D., Morgantown, W. Va.; President, West Virginia University, since July 1, 1946. Doctor of Philosophy, Columbia University, 1926. Admitted to the Texas Bar and to the Bar of the Supreme Court of the United States. Professor of Government at University of Texas, and American University Graduate School, Washington, D. C. In charge of electrical communications, Treaty Division, Department of State, 1930 to 1934. State Department Member of Interdepartmental Committee on Communications. Member Federal Communications Commission, 1934 to 1937. Director, Committee on Scientific Aids to Learning, National Research Council, 1937 to 1946. Executive Secretary, National Defense Research Committee, 1940 to 1945. Deputy Director, Office of Scientific Research and Development, December 19, 1945, to June 30, 1946. Author, editor, and contributor to various professional journals.

J. WARRICK THOMAS, M. D., Richmond, Virginia. Co-Director Graham-Thomas Clinic since May 1946. Teaching positions: Associate in Medicine, Medical College of Virginia, and Graham-Thomas Clinic School of Allergy Technology. Former head of Department of Allergy, Cleveland Clinic, 1939-1944. Member: American College of Physicians (Fellow), American College of Allergists (Fellow), American Academy of Allergy, Central Society for Clinical Research, International Correspondence Club of Allergy, Southeastern Allergy Association (President 1947-1948), American College of Chest Physicians (Fellow), American Academy of Applied Nutrition. Editorial board-Quarterly Review of Allergy and Applied Immunology since 1946. Assistant editor Annals of Allergy, and Member Board of Regents, 1942-1946. Author of numerous articles and publications.

M. FRANK TURNEY, M. D., Brooklyn, N. Y.; Chief Neurosurgeon at the following Neurosurgical Centers during World War II: Lovell, Cushing, McCaw, and Hammond General Hospitals. Associated with Dr. Jefferson Browder, Brooklyn, since 1946. Staff of Kings County, Methodist, Brooklyn, Long Island College, Manhattan Beach VA, and Halloran VA hospitals.

J. EDWIN WOOD, JR., M. D., Charlottesville, Va.; Professor of Practice of Medicine, University of Virginia Department of Medicine, Charlottesville. American Society for Clinical Investigation, Association of American Physicians, American Clinical and Climatological Association, Southern Society for Clinical Research. Fellow, American College of Physicians.

DELEGATES AND ALTERNATES*

B-R-T (3)—Delegates, Donald R. Roberts, Elkins, Hu C. Myers, Philippi, Guy H. Michael, Parsons. Alternates, W. E. Whiteside, Parsons, W. G. Harper, Elkins, and F. B. Murphy, Philippi.

BOONE (2)—Delegate, David H. Hill, Madison.

BROOKE (1)—Delegate F. L. Matson, Wellsburg. Alternate, Ralph McGraw, Follansbee.

CABELL (7)—Delegates, Thomas B. Baer, C. H. Boso, J. J. Brandabur, J. F. Barker, R. J. Stevens, V. L. Chambers, and J. L. Hutchison, Huntington. Alternates, C. B. Wright, Lee F. Dobbs, C. S. Duncan, A. S. Jones, John D. German, C. Stafford Clay, and Cole D. Genge, Huntington.

CENTRAL WEST VIRGINIA (3)—Delegates, J. M. Cofer, Bergoo, R. M. Fisher, Weston, and W. E. Echols, Richwood. Alternates, J. C. Huffman, Buckhannon, W. W. Huffman, Gassaway, and Guy Stalnaker, Glenville.

DODDRIDGE (1)—Delegate, A. Poole, West Union.

EASTERN PANHANDLE (2)—Delegate, G. O. Martin, Martinsburg.

FAYETTE (3)—Delegate, C. B. Hughes, Jr., Montgomery.

GREENBRIER VALLEY (2)—Delegates, R. F. Hawkins, Lewisburg, A. G. Lanham, Ronceverte. Alternates, P. E. Prillaman, Ronceverte, and C. F. McClintic, Williamsburg.

HANCOCK (2)—Delegate, Leonard E. Yurko, Weirton.

HARRISON (5)—Delegates, J. F. McCuskey, H. V. Thomas, L. E. Neal, C. O. Post, Clarksburg, and F. Carl Chandler, Bridgeport. Alternates, S. S. Hall, D. H. Lough, J. E. Wilson, J. F. Lembright, and A. J. Weaver, Clarksburg.

KANAWHA (11)—Delegates, John W. Hash, P. A. Tuckwiller, John E. Lutz, Everett W. Squire, Paul H. Revercomb, H. M. Escue, W. C. Stewart, Howard A. Swart, A. A. Wilson, Bert Bradford, Jr., and H. M. Beddow. Alternates, T. P. Mantz, W. E. Hoffman, A. C. Chandler, N. H. Newhouse, Russel Kessel, L. B. Matthews, W. B. Rossman, Marion Jarrett, A. B. Bowyer, George O. Nelson, and H. R. W. Vial.

LOGAN (2)—Delegate, W. E. Brewer, Logan.

MARION (4)—Delegates, J. J. Jenkins, Sr., Farmington, George T. Evans, Idamay, and L. D. Norris, Fairmont. Alternates, C. J. Carter and J. R. Tuckwiller, Fairmont.

MARSHALL (2)—Delegates, David L. Ealy and J. C. Peck, Moundsville. Alternates, Wm. P. Bradford and H. B. Ashworth, Moundsville.

MASON (1)—Delegate, C. Leonard Brown, Pt. Pleasant. Alternate, Frank Long, Pt. Pleasant.

MERCER (3)—Delegates, Frank J. Holroyd, Princeton, E. L. Gage, Bluefield, and C. M. Scott, Bluefield. Alternates, L. J. Pace, Princeton, and O. G. King, Bluefield.

MINGO (2)—Delegates, John C. Lawson and George W. Easley, Williamson. Alternates, Frank J. Burien and J. C. Gaskel, Williamson.

MONONGALIA (3)—Delegates, Clark K. Sleeth, E. F. Heiskell, Sr., and E. B. Tucker, Morgantown. Alternates, C. C. Romine and L. M. Strawn, Morgantown.

McDOWELL (4)—Delegates, Dante Castrodale, A. J. Villani, E. O. Gates, Welch, and L. E. Dunman, Gary. Alternates, H. P. Evans, Keystone, H. T. Schiefelbein, and C. B. Chapman, Welch.

OHIO (5)—Delegates, J. D. Bird, Jr., Carroll Boggs, Paul V. Graham, D. E. Greeneltch, and G. L. Vieweg, Jr., Wheeling. Alternates, N. K. Joseph, Wilda Joseph, R. U. Drinkard, and H. G. Weiler, Wheeling.

PARKERSBURG ACADEMY (5)—Delegate, Logan W. Hovis.

POTOMAC VALLEY (2)—Delegate, M. H. Maxwell, Moorefield.

PRESTON (2)—Delegate, C. Y. Moser, Kingwood.

RALEIGH (4)—Delegates, Fred Richmond, D. D. Daniel, Clark Kessel, and L. M. Halloran, Beckley. Alternates, Paul E. Vaughan, and T. U. Vermillion, Beckley.

SUMMERS (1)—Delegate, D. W. Ritter, Hinton.

TAYLOR (1)—Delegate, Paul P. Warden, Grafton. Alternate, K. H. Trippett, Galloway.

WETZEL (1)—Delegate, A. M. Dyer, Jr., Pine Grove. Alternate, E. C. Blum, New Martinsville.

WYOMING (2)—Delegates, J. F. Biggart, Mullens.

*The list of Delegates and Alternates is incomplete as this issue of The Journal goes to press.

BREAKFAST, LUNCHEON, AND DINNER MEETINGS*

Monday, May 10

12:00—Section on Industrial Health. Luncheon, Clubhouse, Owens-Illinois Plant, Huntington. J. S. Felton, M. D., Oak Ridge, Tennessee, guest speaker. (J. L. Patterson, M. D., in charge.)

12:30—West Virginia Obstetrical & Gynecological Society. Luncheon. Sophia J. Kleegman, M. D., New York City, guest speaker. Topic: "The Physician's Role in Education for Marriage and Family Life." (Edwin J. Humphrey, M. D., in charge.)

12:30—West Virginia Academy of Ophthalmology and Otolaryngology. Luncheon. Charles Iliff, M. D., Baltimore, guest speaker. Topic: "The Use of Beta Irradiation in Ophthalmology." (F. C. Reel, M. D., in charge.)

6:00—West Virginia Heart Association. Annual dinner meeting. (Fred R. Whittlesey, M. D., in charge.)

*Hotel Prichard unless otherwise indicated.

Tuesday, May 11

8:00—Roundtable Breakfast on Tuberculosis. Section on Industrial Health, and Tuberculosis Committee, sponsors. J. S. Felton, M. D., Oak Ridge, Tennessee, and John B. Barnwell, M. D., Washington, D. C., guest speakers. Topic: "Tuberculosis Control in Industry. (W. L. Cooke, M. D., in charge.)

8:00—Association of Pathologists of West Virginia. Breakfast, St. Mary's Hospital, Huntington. Microscopic slide session will follow. (W. T. McClure, M. D., in charge.)

12:30—Section on Pediatrics. Luncheon. Francis F. Schwentker, M. D., Baltimore, guest speaker. (Harry E. Baldock, M. D., in charge.)

12:30—Joint Luncheon, West Virginia Heart Association, Section on Internal Medicine, and W. Va. Chapter of the ACP. Honor guests: J. Edwin Wood, Jr., M. D., Perrin H. Long, M. D., Emil Novak, M. D., and Russell L. Haden, M. D. (Fred R. Whittlesey, M. D., Wm. M. Sheppe, M. D., and D. A. MacGregor, M. D., in charge.)

6:00—Medical College of Virginia Alumni Association. Annual dinner meeting. Roshier W. Miller, M. D., Richmond, Va., guest speaker. Topic: "What Should I, as an Alumnus, Do?" Dana T. Moore, M. D., Parkersburg, President, West Virginia Chapter, presiding. Annual election of officers. (Mrs. Helen M. Seller, Assistant Alumni Secretary, in charge.)

6:00—West Virginia Physicians Committee. Dinner. Frederick Hotel. (James S. Klumpp, M. D., in charge.)

Wednesday, May 12

8:00—Roundtable Breakfast on Rheumatic Fever. Sponsored by West Virginia Heart Association, Section on Internal Medicine, and W. Va. Chapter of American College of Physicians. J. Edwin Wood, M. D., Charlottesville, and Perrin H. Long, M. D., Baltimore, guest speakers. All American Legion Post Surgeons are urged to attend. (Moderator: Frank V. Langfitt, M. D.)

8:00—Roundtable Breakfast on Neurosurgery. Sponsored by Section on Surgery. M. Frank Turney, M. D., Brooklyn, and Fred W. Rankin, M. D., Lexington, Ky., guest speakers. Topic: "Problems of Neurosurgery." (Russell B. Bailey, M. D., in charge.)

8:00—Association of Pathologists of West Virginia. Breakfast, St. Mary's Hospital, Huntington. Microscopic slide session will follow. (W. T. McClure, M. D., in charge.)

11:00—West Virginia Urological Association. Luncheon meeting, Guyan Country Club. Clinical X-Ray discussion will precede luncheon, which will be served at 12:30. Austin I. Dodson, M. D., Richmond, guest speaker. (R. D. Gill, M. D., and C. A. Hoffman, M. D., in charge.)

12:30—Section on Surgery. Luncheon. Fred W. Rankin, M. D., Lexington, M. Frank Turney, M. D., Brooklyn, and J. Stewart Rodman, M. D., Philadelphia, guest speakers. (Hugh A. Bailey, M. D., in charge.)

12:30—Luncheon. Orthopedists. (R. L. Anderson, M. D., in charge.)

12:30—Luncheon. Radiologists. (V. L. Peterson, M. D., in charge.)

12:30—Luncheon. American Society of Anesthesiologists. (Arkie B. Bowyer, M. D., in charge.)

7:00—Annual Banquet.

SCIENTIFIC EXHIBITS—DESCRIPTION

(Bridge Room, Hotel Prichard)

1. **American Medical Association**—"Atomic Energy."
   Charts showing basic information concerning atomic energy, as well as the display of a Geiger Counter and other material.

2. **American Medical Association**—"Use and Abuse of Barbiturates."
   Charts and posters showing the names and chemical formulas of thirty products on the market. This display shows when and how they should be used and the evil effects of their misuse.

3. **National Foundation for Infantile Paralysis**—"Diagnostic Aids in Bulbar Polio."
   Depicts some of the critical signs of acute anterior poliomyelitis and gives diagnostic aids. Also shown is the histopathology of bulbar polio clinical syndromes with suggested methods of therapeusis for symptoms.
   Information displayed is based on research studies at the University of Minnesota.

4. **West Virginia State Nutrition Committee**—"A Nutrition Program for West Virginia."
   Educational exhibit giving high points in the need for the West Virginia Good Breakfast Program and the way failure to eat a good breakfast can affect a school child or adult.

5. **Owen Clinic, Huntington**—"Mental Illness."
   Statistics shown by posters, graphs, etc., concerning the mentally ill in West Virginia. Also comparison of personnel and expenditures of various institutions for tuberculosis, mental illness, cancer research, etc.

6. **Kanawha County Planned Parenthood Association**—"Planned Parenthood—Its Three Objects."
   This exhibit takes up the three phases of Planned Parenthood:
   (A) Infertility, the efforts of the Planned Parenthood Federation of America to stress its importance to the American family.
   (B) Contraception, with instructions in the technique of birth control where such measures are indicated.
   (C) Marriage Counselling—its value and increasing influence in reducing the incidence of divorce.

7. **West Virginia State Department of Health**—"Hospital Construction Program."

Three panels: Center panel has map of West Virginia showing regions and areas for hospital construction plan. Two side panels give description of hospital construction plan for West Virginia under the Hill-Burton act.

8. **West Virginia State Department of Health**—"Premature Center."
   Three panels: Center panel with model of new Premature Center now in operation at Herbert Thomas Memorial Hospital, South Charleston. Two side panels give description of services offered by Division of Maternal and Child Health, State Department of Health, in regard to prematures in West Virginia.

9. **Department of Anatomy, West Virginia University, T. W. Williams, M. D.**—"Plastic Models in Anatomy."
   Plastic models of anatomical specimens.

10. **Department of Physiology, West Virginia University, Edward J. VanLiere, M. D.**—"(A)—Studies in Anoxia, and (B) Central Nervous System Depressant in Gastric Motility in Man."
    Anoxia: The charts show the effect of anoxia on the glucose tolerance curve in the dog. They also show the influence of acclimatization on the rise of blood sugar produced by altitude.
    Central Nervous Depressant: The action of several agents are shown on gastric motility in man.

11. **Department of Pathology, West Virginia University, M. L. Hobbs, M. D.**—"Endometrial Changes."
    Photographs showing normal cyclic endometrial changes including hyperplasia, adenocarcinoma, and inflammation.

12. **Department of Pathology, Laird Memorial Hospital, Montgomery, Peter Ladewig, M. D.**—"The Human Cell in Labor."
    A number of photomicrographs showing the picturesque changes which the heart, liver, kidney, and bone marrow cells of the human body undergo in the course of multiplication.

TECHNICAL EXHIBITS

Space	*Exhibitor*
17	A. S. Aloe Company
29	Ames Company, Inc.
18	Am-Ray Corporation
2	Borden Company
12	Burroughs Wellcome & Co.
13	Cameron Surgical Specialty Company
21	Ciba Pharmaceutical Products, Inc.
28	Coca-Cola Company
9	Doho Chemical Corp.
33	General Electric X-Ray Corporation
34	Holland-Rantos Company, Inc.
16	Kloman Instrument Co.
7	Lanteen Medical Laboratories, Inc.
4	Lederle Laboratories
35	Eli Lilly & Company
15	M & R Dietetic Laboratories, Inc.
8	McLain Surgical Supply, Inc.
23	Mead Johnson & Company
30-31	Medical Arts Supply Co.
3	Medical Protective Company
32	National Drug Company
25	Ortho Pharmaceutical Corporation
6	Parke, Davis & Co.
27	Pet Milk Company
5	Picker X-Ray Corporation
10	Wm. P. Poythress & Co., Inc.
19	Sharp & Dohme, Inc.
20	W. B. Saunders Company
14	G. D. Searle & Co.
11	E. R. Squibb & Sons
22	U. S. Vitamin Corporation
1	Van Pelt & Brown, Inc.
24	White Laboratories, Inc.
26	The Max Wocher & Son Co.

TECHNICAL EXHIBITS—DESCRIPTION

(Governor Cabell Hotel)

A. S. ALOE COMPANY

Booth 17

Our representative, Mr. R. Hightower, will welcome friends at booth No. 17, where he will have on display a representative cross section of our complete line of surgical, hospital, and laboratory equipment and supplies. Featured will be a complete line of government surplus instruments available at the present time—especially selected, fully certified instruments at approximately one-half the regular cost.

AMES COMPANY, INC.

Booth 29

Ames Company representatives will be glad to discuss Decholin, the standard hydrocholeretic agent for the treatment of biliary tract diseases.

They will also demonstrate Clinitest and Hematest—simplified tests for the detection of urine-sugar and occult blood. Mr. C. O. Kampf in charge.

AM-RAY CORPORATION

Booth 18

Jimmy Ardit will be in charge of the Am-Ray exhibit to extend greetings. Films will be exhibited, x-ray items, the new Microtherm, and a Cardiograph.

THE BORDEN COMPANY

Booth 2

We invite your attention to GERILAC, a vitamin fortified powdered milk for well rounded nutrition in convalescense, pre and post-operative diets, geriatrics, pregnancy and lactation, and soft and liquid diets. Likewise exhibited will be our long established products for infant feeding: BIOLAC, DRYCO, MULL-SOY, MERRELL SOULE SPECIAL MILKS, general purpose KLIM and BETA LACTOSE.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Booth 12

Among significant products featured will be 'WELLCOME' GLOBULIN INSULIN, which provides an action which is timed to be more suitable for the average diabetic; 'TABLOID' 'EMPIRIN' COMPOUND with CODEINE PHOSPHATE gr. 1, No. 4, for relief of severe pain; 'NUTRAGEST', the palatable dietary compound containing pre-digested proteins (amino acids and polypeptides), carbohydrates; and 'METHEDRINE', a recent sympathomimetic drug of wide therapeutic application.

Mr. J. P. McKay, Mr. W. H. McDanel, and Mr. T. W. Storer in charge.

CAMERON SURGICAL SPECIALTY CO.
Booth 13

See the new Cameron Cauterodynes and Cauteradios for Electro-surgery, Electro-cauterization and Electro-coagulation; Coagulair-Sigmoidoscope; Electro-Diagnostosets; Radiolucent Cannula; Flexible Gastroscopes; Bronchoscopes—Esophagoscopes—Laryngoscopes; Mirror Headlites; Binocular Spectacle Loupe; Magniscope and other specialties.

Mr. W. E. Mettler in charge.

CIBA PHARMACEUTICAL PRODUCTS, INC.
Booth 21

Exhibiting "Economical Hormone Therapy" featuring METANDREN Linguets, the most potent oral androgen in tablets, designed for absorption through sublingual mucosa; LUTOCYLOL Linquets, orally effective progestogen especially designed for sublingual absorption; and ETHINYL ESTRADIOL, the most potent oral estrogen.

Mr. S. L. Koons and Mr. R. W. Berry in charge.

THE COCA-COLA COMPANY
Booth 28

Ice-cold Coca-Cola will be served the delegates with the compliments of The Coca-Cola Company through the joint cooperation of the Huntington Coca-Cola Bottling Company.

Mr. W. Clay Harris, of Huntington, in charge.

DOHO CHEMICAL CORPORATION
Booth 9

The makers of Auralgan are featuring at this meeting their new sulfa preparation, Otosmosan, indicated in the treatment and control of chronic suppurative ears.

Mallon, division of Doho, is introducing our new topical anesthesia, Rectalgan, for relief of pain and itching in hemorrhoids and pruritus. This new therapy enjoys many advantages over the outmoded rectal suppositories and ointments.

Mr. Rufus J. A. Ruglen in charge.

GENERAL ELECTRIC X-RAY CORPORATION
Booth 33

X-ray supplies and accessories; electro-medical equipment, supplies and accessories.

Messrs. W. C. Moore, W. L. Supler, C. H. McMillan, J. A. Ross, and M. C. Taylor in charge.

HOLLAND-RANTOS COMPANY, INC.
Booth 34

KOROMEX JELLY and KOROMEX CREAM will be featured. You may recall that it was Holland-Rantos Company that pioneered the introduction of modern contraceptive technique—so frequently referred to as the Koromex Method. Medical service representatives will be on hand to discuss with interested physicians the latest data on KOROMEX JELLY and CREAM.

KLOMAN INSTRUMENT COMPANY
Booth 16

Exhibiting the latest design of medical furniture just off production from the Hamilton Manufacturing Company, Two Rivers, Wisconsin, and described in our advertisement in the May issue of the West Virginia Medical Journal. Also on display, the latest in surgical instruments and diagnostic equipment.

Mr. Carl Carte and Mr. Samuel Smithy in charge.

LANTEEN MEDICAL LABORATORIES, INC
Booth 7

The new diaphragm fitting technique will be featured together with the LANTEEN FLAT SPRING DIAPHRAGM. Also featured will be PROCARMIN, an Autolytic Hydrolsate combined with high protein B complex factors.

Mr. James F. Grindle in charge.

LEDERLE LABORATORIES DIVISION
American Cyanamid Company
Booth 4

The Lederle exhibit will feature purogenated diphtheria, tetanus, and diphtheria-tetanus toxoids, new highly refined antigens characterized by lessened reactivity and antigenic in lower doses, Folvite brand folic acid, a synthetic product useful in certain types of macrocytic anemias, and Cardiolipin, a stable non-nitrogenous phospholipid from beef heart used in tests for syphilis.

ELI LILLY & CO.
Booth 35

Featured at the Lilly exhibit will be new therapeutic developments. Many Lilly products are to be on display; representative literature will be available. Lilly medical service representatives are to be in attendance to aid visiting physicians in every possible way.

Mr. K. F. McKay in charge.

M & R DIETETIC LABORATORIES, INC.
Booth 15

Displaying SIMILAC, a food for infants deprived either partially or entirely of breast milk. Mr. E. M. Smith will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

McCLAIN SURGICAL SUPPLY, INC.
Booth 8

A complete line of Burdick Physio-therapy equipment, surgical instruments, and all types of diagnostic instruments, and metal and wood furniture.

Mr. Ralph C. Schwarz and Mr. Fred S. Watson in charge.

MEAD JOHNSON & COMPANY

Booth 23

Amigen and Protolysate will be on display at the Mead Johnson exhibit. Mead Johnson has pioneered the amino acid field commercially; the products have been described in more than one hundred and forty articles in the medical literature; this year they are available. Trained representatives will be at the Mead exhibit to discuss details of the new amino acid products. Shown also will be Dextri-Maltose, Pablum, Pabena, Oleum Percomorphum and the other Mead products used in Infant Nutrition. Protenum, a new high-protein product, will be displayed. Also Lonalac for low-sodium diets.

MEDICAL ARTS SUPPLY CO.

Booths 30 & 31

Surgical instruments, equipment, x-ray, etc.
Mr. M. L. Clovis in charge.

MEDICAL PROTECTIVE COMPANY

Booth 3

The most exacting requirements of adequate liability protection are those of the professional field. The Medical Protective Company, specialists in providing protection for professional men, invites you to confer at their exhibit with the representatives there. They are thoroughly trained in Professional Liability underwriting.

Mr. William H. Chasteen in charge.

NATIONAL DRUG COMPANY

Booth 32

"Resinat", the resin antacid for the treatment of peptic and duodenal ulcers, will be the featured product at the booth of The National Drug Company. You are cordially invited to visit our booth where trained representatives will be available to explain the efficacy and discuss the therapeutic value of this new antacid. Other ethically promoted products manufactured by this Company will be displayed and detailed.

Mr. H. M. Ballentine in charge.

ORTHO PHARMACEUTICAL CORPORATION

Booth 25

Ortho cordially invites you to visit Booth 25. Two new pharmaceuticals will be featured—Nidoxital, for the nausea and vomiting of pregnancy; and TRIPLE SULFA CREAM, for non-specific and postoperative vaginitides. Ortho's well-known line of control of conception items will also be on display.

PARKE, DAVIS & COMPANY

Booth 6

Members of the Medical Service Staff of PARKE, DAVIS & COMPANY will be available at our technical exhibit for consultation and discussion relating to regular products classified in our Pharmaceutical, Biologic, and Medicinal lists. Unusual specialties of recent development: Benadryl, Etamon Chloride, Oxycel, Thrombin Topical, Influenza Vaccine, Antibiotics, Hypnotics, Amino Acids, and various Biologics will be featured in the exhibit. You are cordially invited to call at our exhibit with the assurance that your interest will be appreciated.

Mr. Robert Sonntag in charge.

PET MILK COMPANY

Booth 27

A complete display of material illustrating the time-saving Pet Milk services available to physicians. Specially trained representatives will be in attendance to give you information about the production of Pet Milk and its use for infant feeding. Miniature cans will be given to physicians visiting the exhibit.

Mr. C. W. Deuink in charge.

PICKER X-RAY CORPORATION

Booth 5

Picker will exhibit the new V-7 fully automatic Vertical Control, incorporating electronic timing and safety circuits to provide efficient and rapid operation of modern x-ray equipment.

Mr. A. C. Lewis in charge.

WM. P. POYTHRESS & CO., INC.

Booth 10

A cordial welcome awaits you at Booth 10. Solfoton, Antrocol, TCS, Uro-Phosphate, Panalgesic, Merpectogel, and other Poythress specialty preparations will be displayed, and covering literature will be available.

Mr. Harry H. Swinson in charge.

SHARP & DOHME, INC.

Booth 19

A cordial invitation is extended to all visitors at booth No. 19. Items on exhibit include a new dosage form of 'Delvinal' Sodium Vinbarbital for the production of obstetric amnesia and analgesia. New antibiotic preparations including Tyrothrycin, along with 'Sulfathalidine' and 'Sulfasuxidine', intestinal bacteriostatic agents, are also being featured.

Mr. Earle Wilks and Mr. W. E. Snead in charge.

W. B. SAUNDERS COMPANY

Booth 20

This company will exhibit their full line of medical books including Hyman's "Integrated Practice of Medicine," Bockus' "Gastro-enterology," Kinsey's "Sexual Behavior in the Human Male," Sollman's "Pharmocology," Beckman's "Treatment," Todd & Sanford's "Clinical Diagnosis by Laboratory Methods," Christopher's "Minor Surgery," Cutting's "Clinical Therapeutics," Dowling's "Acute Bacterial Diseases," Brams'

"Treatment of Heart Disease," Cecil's "Medicine," Rubin's "Diseases of the Chest and X-ray," and many others.

G. D. SEARLE & CO.
Booth 14

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Hydryllin, the new anti-histaminic, as well as such time-proven products as Searle Aminophyllin in all dosage forms, Metamucil, Ketochol, Floraquin, Kiophyllin, Diodoquin, Pavatrine and Pavatrine with Phenobarbital, will be featured.

E. R. SQUIBB & SONS
Booth 11

Presenting a wide variety of newly released Squibb preparations for prescription use, among them Liafon, a new hematinic, Pneumococcus Polysaccharides for active immunization, Penicillin Soluble Troches 5000 units, P. O. W. Fluid, Amniotin Suppositories (capsule type), and Diethylstilbestrol Tablets 25 mg.

U. S. VITAMIN CORPORATION
Booth 22

Full color illustrated brochure, "Diagnosing Vitamin Deficiencies," together with professional samples and literature on VI-SYNERAL, POLY-B, VI-LITRON, HYPERVITAM, LIPO-HEPLEX, DALSOL, DESIVER, AMIPROTE, RUTIN-RUTASCORB, METHISCHOL, TRI-SULFANYL and others.

Mr. Paul Shipley in charge.

VAN PELT & BROWN, INC.
Booth 1

Van Pelt and Brown will feature their new Hemopoietic preparation VIFOLIRON, containing Folic Acid, Liver, Iron and other factors of the Vitamin B Complex.

Mr. W. J. Feeley in charge.

WHITE LABORATORIES, INC.
Booth 24

White's Dienestrol Tablets (Council Accepted)—a new orally effective synthetic estrogen is featured. Complete information and literature are available regarding the advantages of Dienestrol's high biologic activity, excellent patient-tolerance and economy.

Other products of White Laboratories are on display and White's Medical Service representatives will be pleased to supply any further information requested.

Mr. C. A. Rouse in charge.

MAX WOCHER & SON CO.
Booth 26

A full line of surgical instruments, sundries and electrical equipment.

Mr. L. E. Boehme in charge.

OFFICIAL PROGRAM
24th Annual Meeting
to the
WOMAN'S AUXILIARY
West Virginia State Medical Association

HUNTINGTON
May 10-12, 1948

Hostess:
Woman's Auxiliary to the
Cabell County Medical Society

SUNDAY AFTERNOON
May 9

2:00—Registration, Lobby, Frederick Hotel

SUNDAY EVENING

9:00—Open House, Hotel Prichard—West Virginia State Medical Association and Auxiliary.

MONDAY MORNING
May 10

9:00—Registration, Lobby, Frederick Hotel.

9:00—Past Presidents' Breakfast, Crystal Room, Frederick Hotel, Mrs. D. E. Greeneltch, Wheeling, *hostess.*

MONDAY AFTERNOON

12:00—Luncheon, Morris Memorial Hospital, Milton, W. Va. Executive Committee of the Woman's Coordinating Board to the Hospital, *hostess.*

1:00—Registration, Lobby, Frederick Hotel.

2:30—Pre-Convention Board Meeting, Third Floor Ballroom, Frederick Hotel, Mrs. F. Carl Chandler, *presiding.*

Invocation—Mrs. William C. Covey, Beckley, President, Raleigh County Auxiliary.

Salute to Flag—Mrs. R. O. Rogers, Bluefield, President, Mercer County Auxiliary.

Pledge of Loyalty—Mrs. Charles Leonard, Elkins, President, Barbour-Randolph - Tucker Auxiliary.

Roll Call.

Official Business.

MONDAY EVENING

6:00—Executive Board Dinner, Crystal Room, Frederick Hotel, Mrs. F. Carl Chandler, *presiding,* Mrs. Edwin J. Humphrey, *chairman.*

Honor Guests: Dr. and Mrs. Thomas Bess, Dr. and Mrs. Wade H. St. Clair, Dr. and Mrs. Hu C. Myers, Dr. and Mrs. Harry V. Thomas, Dr. and Mrs. John P. Helmick, Dr. and Mrs.

Ulysses G. McClure, Dr. and Mrs. F. Carl Chandler, and Dr. and Mrs. C. A. Hoffman.
(Members of the Executive Board and their husbands are invited to attend this dinner.)

Invocation—Harry V. Thomas, M. D., Clarksburg.

Presentation of Honor Guests.

Greetings from the State Medical Association—Thomas Bess, M. D., Keyser, President.

Program—Group singing of old familiar tunes, with appropriate words.

TUESDAY MORNING
May 11

9:30—Formal Opening of Convention, Third Floor Ballroom, Frederick Hotel.

Invocation—The Rev. Rolla S. Kenaston, Johnson Memorial Church, Huntington.

Salute to Flag—Mrs. J. H. Murry, Kimball, President, McDowell County Auxiliary.

Pledge of Loyalty—Mrs. R. U. Drinkard, Jr., Wheeling, President, Ohio County Auxiliary.

Address of Welcome—Mrs. W. E. Neal, Huntington, Cabell County Auxiliary.

Response—Mrs. Arthur C. Chandler, Charleston, President, Kanawha County uxiliary.

In Memoriam—Mrs. Charles L. Goodhand, Parkersburg, President, Parkersburg Academy Auxiliary.

Solo—The Lord's Prayer, Mrs. Andrew J. Weaver, Accompanist, Mrs. John F. McCuskey.

Roll Call.

Announcements of Convention Chairman—Mrs. Edwin J. Humphrey.

Registration Report—Mrs. H. E. Beard.

Rules of Procedure—Mrs. Ulysses G. McClure.

Report of 1947 National Convention at Atlantic City—Mrs. Ulysses G. McClure, National Director.

Report of National Conference at Chicago—Mrs. W. E. Hoffman, President Elect.

Report of Southern Medical Association Convention at Baltimore—Mrs. Ralph S. McLaughlin, Councillor.

Reports of Officers:
- President—Mrs. F. Carl Chandler.
- President Elect—Mrs. W. E. Hoffman.
- First Vice President—Mrs. John F. McCuskey
- Second Vice President—Mrs. L. D. Norris.
- Third Vice President—Mrs. Thomas U. Vermillion.
- Fourth Vice President—Mrs. Dana T. Moore.
- Recording Secretary—Mrs. C. J. Holley
- Corresponding Secretary—Mrs. Harry V. Thomas.
- Treasurer—Mrs. Ross P. Daniel.
- Auditor—Mrs. S. S. Hall.

Announcements.

TUESDAY AFTERNOON

12:30—Auxiliary Luncheon, Fireside Room, Frederick Hotel.

Honor Guests—Mrs. Olin Sanford Cofer, President of the Woman's Auxiliary to the Southern Medical Association, and Presidents and Presidents Elect of neighboring state auxiliaries. Mrs. John P. Helmick, Past President, Southern Medical Association Auxiliary *presiding*. Mrs. A. G. Rutherford, *chairman*.

Invocation—Mrs. Ralph S. McLaughlin, Councillor, Southern Medical Association, Auxiliary.

Address—"Love, Friendliness, and Good Fellowship"—Mrs. Olin S. Cofer, President, Southern Medical Auxiliary.

3:00—General Meeting, Third Floor Ballroom, Frederick Hotel.

Minutes—Mrs. C. J. Holley.

Unfinished Business.

New Business.

Election of Delegates to 1948 National Convention.

Reports of Committee Chairmen:
- Archives—Mrs. Herbert Beddow.
- Editorial—Mrs. J. Preston Lilly.
- Exhibits—Mrs. Andrew J. Weaver.
- Finance—Mrs. Frank J. Holroyd.
- Historian—Mrs. Edward W. Hickson.
- Hygeia—Mrs. Junior Myers.
- Legislation—Mrs. Ralph S. McLaughlin.
- Parliamentarian—Mrs. Ulysses G. McClure.
- Program—Mrs. S. S. Hall.
- Public Relations and Post-War Planning—Mrs. W. A. Thornhill.
- Revisions—Mrs. L. E. Shrewsbury.
- Bulletin—Mrs. H. A. Shaffer.
- Speakers Bureau—Mrs. Geo. F. Evans.
- Essay Contest—Mrs. D. E. Greeneltch.
- Southern Medical—Mrs. Ralph S. McLaughlin.
- Special Projects—Mrs. Ralph Hogshead.
- Report of Registration—Mrs. H. E. Beard.
- Convention Announcements—Mrs. Edwin J. Humphrey.

Adjournment.

WEDNESDAY MORNING
May 12

9:00—Registration, Lobby, Frederick Hotel.

9:30—General Meeting, Third Floor Ballroom, Frederick Hotel.

Minutes—Mrs. C. J. Holley.

Roll Call.

Report of Credentials and Registration—Mrs. H. E. Beard.

Announcements of Convention Chairman—Mrs. Edwin J. Humphrey.

Unfinished Business.

New Business.

Reports:
- County Presidents.
- Budget Committee—Mrs. Frank J. Holroyd.
- Credits and Awards—Mrs. J. F. Lembright.
- Resolutions Committee — Mrs. Harry V. Thomas.
- Nominating Committee — Mrs. Arthur C. Chandler.

Election of Officers.

Installation of Officers—Mrs. Eustace A. Allen, President Woman's Auxiliary to the American Medical Association.

Presentation of Gavel to the new president, Mrs. W. E. Hoffman—Mrs. F. Carl Chandler.

Inaugural Address — Mrs. W. E. Hoffman, Charleston.

Announcements.

Adjournment.

WEDNESDAY AFTERNOON

12:30—Auxiliary Luncheon, Fireside Room, Frederick Hotel.

Honor Guests: Mrs. Eustace A. Allen, President of the Woman's Auxiliary to the American Medical Association, Mrs. W. E. Hoffman, President of the Woman's Auxiliary to the West Virginia State Medical Association, and Presidents and Presidents Elect from neighboring state auxiliaries, Mrs. V. E. Holcombe, Past President, Auxiliary to the American Medical Association, *presiding,* Mrs. J. Russell Cook, *chairman.*

Invocation—Mrs. Ulysses G. McClure.

Address—Mrs. Eustace A. Allen.

Musical Program.

2:30—Post-Convention Board Meeting, Third Floor Ballroom, Mrs. W. E. Hoffman, *presiding.*

School of Instruction for officers and chairman.

CONVENTION NOTES

All meetings and social events will be held at Auxiliary Headquarters in the Frederick Hotel.

Auxiliary meetings and all social events are open to all visiting ladies, whether members of an auxiliary or not. Those present are requested to register.

Tickets for all luncheons and dinners must be purchased in advance at the "reservation table" at Registration Headquarters, in the Lobby of the Frederick Hotel.

CONVENTION ACTIVITIES

REGISTRATION—GOVERNOR CABELL
GENERAL SESSIONS—THE PRICHARD
WOMAN'S AUXILIARY—THE FREDERICK
SCIENTIFIC EXHIBITS—THE PRICHARD
TECHNICAL EXHIBITS—GOVERNOR CABELL

PRE-CONVENTION COMMITTEE REPORTS

COMMITTEE ON INDUSTRIAL HEALTH

When the Committee on Industrial Health met last year, we were very much perturbed over what the report of the survey made by Admiral Boone and his staff of the bituminous coal mines would contain concerning Industrial Health. After this report was published, in our opinion, we were not hurt as much as we expected.

There are just a few points in his report that we think we should consider:

1. "The bituminous coal industry, upon which many other industries depend, has lagged in its appreciation and utilization of preventive medical programs for its workers." We believe that this statement is entirely true.
2. "The great majority of physicians serving the coal mining industry are engaged primarily in general practice of medicine. By tradition and by the nature of the conditions under which they are employed, they have not been made responsible for adequate programs of industrial hygiene and preventive medicine." This statement is also true.
3. He outlines a comprehensive program of Industrial Medicine and Hygiene which is adaptable to many modern industries:

A. Medical care of industrial injuries and occupational diseases.

B. Initial surveys or studies and periodic inspections of working environments to discover and control health hazards, supplemented by laboratory analyses of gasses, dusts, water, etc.

C. Application of measures for controlling health hazards by adopting the techniques of industrial hygiene engineering, safety engineering, and sanitary engineering.

D. Effective programs of first aid instruction and of health and safety education for employees.

E. Routine and thorough physical examination (pre-employment or pre-placement, periodic and terminal) of all employees.

F. Job analyses by medical personnel to classify jobs in terms of physical requirements.

G. Compilation and analysis by medical departments of medical records, including accident, illness and absenteeism reports to evaluate the program and direct its application. These activities are recognized as highly specialized endeavors requiring trained and experienced professional personnel. However, it should be remembered that private consultant services are available and that most state health departments and the Federal Government have specialists who are available to advise in the establishments and conduct of such programs.

This brings us to one of the points that we have in mind. This is the institution and control of the Industrial Health program in the smaller industries and in the bituminous coal operations. We have tried in vain for the last several years to reach the smaller industries and establish an Industrial Medical program. Our thought is that as a committee spending an hour or two hours a year in a meeting where we discuss these things, there is no chance that we can establish an effective program.

We have in our State Health Department a bureau of Industrial Health whose duty it is to promote these Industrial Health programs throughout the state. It is now manned by an industrial engineer and an industrial nurse, both of whom are doing a good job in their respective fields. But, for a period of about two years, they have not had a medical director as specified when this bureau was established. If this important bureau in the State Health Department were functioning as it should be we would have full-time personnel teaching industry and labor the value of Industrial Health programs.

Since the establishment of this bureau, we have had two or three medical directors, all of whom have left the department for more lucrative positions with private industry. In other words, they have used our department only as a stepping stone and contact agent to better positions. It is absurd to think that any man qualified to conduct this bureau in a satisfactory manner would work for the small salary offered him. And, until this is corrected, we cannot hope to have a functioning bureau of industrial health in our state.

It is our opinion that until this bureau is functioning under a well qualified medical director we will not be able to sell the program of industrial health in which we are so interested.

There is one more paragraph in Admiral Boone's report that we would like to call to your attention, not from the standpoint of constructive criticism, but as a warning of what we may expect. We quote: "State agencies, including state departments of mine, of health and of labor, in addition to federal government agencies, are interested in health and safety in the mining industry. The Federal Bureau of Mines, since its inception in 1910, has devoted considerable effort to studying the working environment of the coal miner in order to develop safety practices. This bureau, for a number of years, has desired to expand its activities beyond the field of safety to include study of all factors related to industrial health; but such expansion has not been possible due to inability to obtain adequate funds with which to correlate its safety activities with the important phases of the problem and to conduct a coordinated comprehensive program."

In this day of free spending by the government agencies, let us hope that the Federal Bureau of Mines remains forgotten, for here would be one of the most accessible and potent entries for government medicine. We are quoting this merely as a warning of what might happen if organized medicine does not take the necessary steps to do this job satisfactorily.

Respectfully submitted,

J. L. PATTERSON, M.D., Chairman.
J. J. BRANDABUR, M.D.,
H. M. BROWN, M.D.,
W. F. ROGERS, M.D.,
W. V. WILKERSON, M.D.,
W. P. BITTINGER, M.D.,
GEORGE W. EASLEY, M.D.,
GEORGE T. EVANS, M.D.,
GEORGE O. NELSON, M.D.

COMMITTEE ON TUBERCULOSIS

The Tuberculosis Committee of the West Virginia State Medical Association met at the Waldo Hotel, in Clarksburg, March 20, 1948. The meeting was attended by Dr. W. L. Cooke, Charleston, Chairman; and Drs. E. T. Goff, Parkersburg; J. N. Reeves, Charleston, and David Salkin, Hopemont.

The following report has been aproved by the members who were present, as well as by Drs. Geo. F. Evans, G. E. Gwinn and J. P. McMullen, the other members to whom copies were mailed.

The committee recommends acceptance of the offer of the West Virginia Tuberculosis and Health Association to pay the expenses of a speaker to address the West Virginia State Medical Association on diseases of the chest at our annual meetings.

The Tuberculosis Committee recommends that the West Virginia State Medical Association take a more active part in attempting to secure larger appropriations for the care of the tuberculosis patients in state sanatoriums. In support of this action, the Tuberculosis Committee recommends that the following resolution be presented to the House of Delegates of the West Virginia State Medical Association for its approval:

> "WHEREAS, The present appropriation for the care of tuberculosis patients in West Virginia State Sanatoriums is only $3.02 per bed per day; and,
>
> "WHEREAS, The present cost per patient day at the three state sanatoriums is between $3.21 and $3.82; and,
>
> "WHEREAS, Many beds are vacant in these institutions due to this discrepancy in cost; and,
>
> "WHEREAS, The appropriation per patient day is much higher in other states and is necessary to give tuberculosis patients adequate care:
>
> "*Therefore, Be It Resolved,* That the House of Delegates of the West Virginia State Medical Association urge the Budget Director, the Board of Public Works and the members of the Legislature to appropriate a sum equivalent to $5.00 per day for each bed in the West Virginia State Sanatoriums."

As the Tuberculosis Committee of the West Virginia State Medical Association feels that the Council of the association acted without having available all the information pertinent to the subject, it requests its Chairman to seek permission to appear before the Council in an effort to have the Council rescind its action opposing the complete subsidy of sanatorium beds for tuberculous patients. If the Council rescinds its action, the Tuberculosis Committee recommends that the following resolution be submitted to the House of Delegates:

> "WHEREAS, The beds for tuberculosis patients are more than 90% subsidized by the state at the present time; and
>
> "WHEREAS, Time is lost in isolating a patient with a communicable disease while the patient is being investigated by the so-called "means test"; and
>
> "WHEREAS, Many patients are forced to leave the sanatorium before they are well because of inability to pay; and
>
> "WHEREAS, Much time is consumed by physicians and other workers in the tuberculosis field in an effort to collect the remaining 10%:
>
> "*Therefore, Be It Resolved,* By the House of Delegates of the West Virginia State Medical Association that the "means test" be eliminated in determining whether or not a tuberculosis patient is completely subsidized at a state tuberculosis sanatorium."

Respectfully submitted,

WILLIAM L. COOKE, M.D., *Chairman.*

COMMITTEE ON DIABETES

At the request of the then existing Committee, Dr. Thomas Bess appointed two additional members to the Committee, i.e., Dr. F. C. Hodges, of Huntington, and Dr. D. C. Ashton, of Beckley.

The Committee has interested itself in the following activities during the past year:

(1) The secretaries of the county medical societies have been advised that speakers conversant with diabetes mellitus are available to speak before their societies when requested.

(2) An offer has been made through various agencies to furnish speakers on diabetes for appearance before lay organizations. So far only two requests of this type have been received.

(3) The Committee has prepared and had published in the West Virginia Medical Journal abstracts of important publications in the field of diabetes as a means of furnishing brief but up-to-date information to the profession in the state on various topics related to this disease.

(4) Methods of taking a census of the diabetic individuals living in West Virginia have been considered but none have been deemed suitable for adoption.

The Committee has had the benefit of cooperation throughout the year of Dr. Hugh L. Wilkerson, Chief of the Diabetes Section of the Public Health Service. Dr. Wilkerson met with the Committee and outlined work which he considered worthwhile and which we hope to carry out in this state at a later date. He has offered to cooperate with the State Department of Health and the Diabetes Committee in carrying out certain studies in this state similar to those currently in progress under his direction at Oxford, Massachusetts, Jacksonville, Florida, and Brookline, Massachusetts. These investigations are aimed at a fairly accurate determination of the number of diabetics in urban or rural counties and in different race groups. An active educational program is carried on in connection with this work. This involves case-finding and careful teaching of patients. The educational program is organized both for the public and for the profession.

Dr. N. H. Dyer, State Health Commissioner, is cooperating with the Committee. At the present, it is planned to establish a case-finding and educational unit in Monongalia County, with headquarters in Morgantown. It is hoped to establish this project during the summer of 1948 so that those living in rural areas may be reached during the period of good weather.

(5) The Diabetes Committee has endorsed a new publication of the American Diabetes Association called the "Diabetes Forecast." This is a journal prepared for diabetic patients.

(6) The committee has endorsed the employment of well-controlled diabetics in industry.

(7) The committee wishes to congratulate the insurance companies which are now accepting well-controlled diabetics for life insurance.

(8) It has long been recognized that vital statistics on diabetes are extremely faulty due to the failure of many physicians to enter the diagnosis in official records. The Committee recommends that members of the profession throughout the state enter the diagnosis of diabetes mellitus on hospital records and all death certificates whether this disease is the primary cause of disability or merely coincidental.

(9) The committee has as a continuing project plans for the development of a camp for diabetic children in West Virginia. The physical and financial difficulties involved in the establishment of such a camp are numerous; however, some have been overcome, and it is to be hoped that we will see the opening of a camp for diabetic children during the next twelve months.

The Committee has continued to maintain contact with the diabetes associations in neighboring states, as well as with the American Diabetes Association. These organizations, in cooperation with the United States Public Health Service and the West Virginia State Medical Association, are supplying and will continue to supply a very marked impetus for work in this field during the coming year.

W. M. SHEPPE, M. D., Chairman,
L. RUSH LAMBERT, M. D.,
WM. A. THORNHILL, M. D.,
FRED R. WHITTLESEY, M. D.,
R. C. NEALE, M. D.,
F. C. HODGES, M. D.,
D. C. ASHTON, M. D.,
GEO. P. HEFFNER, M. D.

DIABETES IN PREGNANCY

The combination of pregnancy and diabetes is a relatively new one because, before the advent of insulin in 1921, most of the diabetic women did not become pregnant. They did not become pregnant because of the pituitary dysfunction that accompanies untreated diabetes, and because of the resultant amenorrhea and sterility. As late as 1910, Whitridge Williams at Johns Hopkins was able to collect only 65 cases in the whole world literature of diabetic women who were pregnant and who carried the pregnancy to term.

Uncontrolled diabetes is exactly the same now as it was in the pre-insulin days. The uncontrolled diabetic who is pregnant must face a maternal mortality of somewhere around 27 or 28 per cent and can expect to run a 60 to 70 per cent chance of her fetus not surviving after it is born.

Insulin, intelligently used, will control diabetes. It will regulate the pituitary function. This results in normal menstrual cycles and in a normal type of fertility.—Ralph A. Reis, M. D., in J. Iowa St. Med. Soc.

CARCINOMA OF THE PROSTATE

Cancer is probably as old as man, for scientists have demonstrated evidence of malignancy in bones, discovered in the very oldest fossil remains. With the increase of life expectancy in modern times—to 47 years in 1900 and almost 67 years in 1947—there has been a startling rise in the number of deaths from cancer, now secon donly to those due to cardiovascular disease. It has been estimated by Minman that at least three to five million, and perhaps as many as eight million men in this country now have carcinoma of the prostate.—Raymond Thompson, M. D., in J. So. Med. and Surg.

WEST VIRGINIA STATE MEDICAL ASSOCIATION

(Founded April 10, 1867)

OFFICERS

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Second Vice President: HAROLD VAN HOOSE, Man
Treasurer: T. MAXFIELD BARBER, Charleston
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IVAN FAWCETT (1949), Wheeling
A. M. A. Alternates:
W. P. BLACK (1948), Charleston
JAMES L. WADE (1949), Parkersburg

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Revision of Constitution and By-Laws

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D. P. A. Advisory

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Fact Finding and Planning

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Medical Education

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Necrology

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Publicity

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Conservation of Vision and Hearing

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SPECIAL COMMITTEES

Diabetes

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Veterans Board of Review

James R. Brown, Huntington, Chairman; Claude B. Smith, Charleston; and Paul H. Revercomb, Charleston.

SECTIONS

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Industrial Health

J. L. Patterson, Logan, President; and V. L. Chambers, Huntington, Secretary.

Internal Medicine

W. M. Sheppe, Wheeling, President; A. C. Woofter, Parkersburg, Vice President; and R. M. Wylie, Huntington, Secretary.

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Harry Baldock, Charleston, Chairman; and Jack Basman, Charleston, Secretary.

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Hugh A. Bailey, Charleston, Chairman; and Bert Bradford, Jr., Charleston, Secretary.

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W. Va. Heart Association

Fred Whittlesey, Morgantown, President; A. Spates Brady, Charleston, Vice President; and Ray H. Wharton, Parkersburg, Secretary-Treasurer.

W. Va. Ob. and Gyn. Society

E. J. Humphrey, Huntington, President; Carl S. Bickel, Wheeling, Vice President; and Harry G. Steele, Bluefield, Secretary-Treasurer.

Association of Pathologists of W. Va.

C. C. Fenton, Morgantown, President (deceased); and W. T. McClure, Wheeling, Secretary-Treasurer.

POSTNASAL DRIP

One of the admitted weaknesses of the average American is a propensity for discussing his symptoms and illnesses and, with little or no urging, to supply his own diagnosis. It is amazing how many people complain of "sinus trouble", "sinus headaches", and "post nasal drip". What is more astonishing is that many patients with such complaints are found to be free of organic disease when examined. Unfortunately, the layman is not alone guilty of presumptive diagnosis of organic nasal or paranasal sinus disease.

In a recent article, Dr. Arthur Proetz classically describes his reaction to the symptom of postnasal discharge:

"To the most recent of those repulsive minor medical bugbears with which the American public delights in saddling itself, it has given an equally repulsive name: "postnasal drip". The term leaves nothing to the imagination. The symptom, on the contrary, leaves everything, which constitutes its chief menace. It brings up the rear of quite a procession of fearsome public enemies: Halitosis; Barber's itch; B. O.; "strep" throat; 'athlete's' foot; and some others. Where the term arose I am unable to discover. Overnight the laity taught it to the doctors in hushed and often despondent tones. One hears it a dozen times a day, stigmatized usually with one of those cliches reserved for incurable diseases."

Obviously there is not such widespread organic disease of the nose and sinuses as the frequency of symptoms might indicate. The answer apparently lies in the fact that many of these self-diagnosed diseases are, in reality, an exaggeration or disturbance of normal functional processes.—Jos. Stamm, M. D., in New Orleans Med. and Surg. J.

EDUCATING THE TUBERCULOUS

Adherents of a democratic sanatorium regime hold the view that tuberculous patients have come to a sanatorium through no fault of their own, and, this being so, one might as well make their stay as pleasant as can be. They regard self-imposed discipline as preferable to imposed authority, and try to bring it about by explanation of reasons for sanatorium rules, which are reduced to the essential minima.

Superintendents of sanatoria of this type believe that a patient enlightened about his condition is better prepared for the time after his discharge than one who has only carried out a drill. For instance, a patient who has really understood the nature of his complaint, the reasons why he has to take things easy and why he has to take certain precautionary measures, is much less likely to act against his own health interests and those of others than a patient who has been subject to "imposed authority" without explanation of the whys and wherefores. Male and female patients in these sanatoria are allowed to associate freely, according to all accounts, without untoward results.—E. Wittkower, M. D., in The Lancet.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary	
Barbour-Randolph-Tucker	Guy Michael	Parsons	Donald R. Roberts	Elkins
Boone	O. D. Ballard	Van	David H. Hill	Madison
Brooke	H. L. Hegner	Wellsburg	F. L. Matson	Wellsburg
Cabell	C. A. Hoffman	Huntington	Thomas B. Baer	Huntington
Central West Virginia	J. E. Echols	Richwood	J. M. Cofer	Bergoo
Doddridge	R. S. White	West Union	A. Poole	West Union
Eastern Panhandle	S. Eliz. McFetridge	Shepherdstown	George O. Martin	Martinsburg
Fayette	Wm. L. Claiborne	Montgomery	C. B. Hughes, Jr.	Montgomery
Greenbrier Valley	H. B. Strader	White Sulphur Spgs.	R. F. Hawkins	Lewisburg
Hancock	Eugene R. McNinch	Weirton	Leonard E. Yurko	Weirton
Harrison	Wm. H. Allman	Clarksburg	J. F. McCuskey	Clarksburg
Kanawha	Paul H. Revercomb	Charleston	John W. Hash	Charleston
Logan	E. H. Starcher	Logan	W. E. Brewer	Logan
Marion	John P. Helmick	Fairmont	Geo. T. Evans	Idamay
Marshall	H. B. Ashworth	Moundsville	David L. Ealy	Moundsville
Mason	Ed. V. McElfresh	Pt. Pleasant	C. Leonard Brown	Pt. Pleasant
McDowell	E. D. Gibson	Iaeger	Dante Castrodale	Welch
Mercer	Daniel Hale	Princeton	Frank J. Holroyd	Princeton
Mingo	Frank J. Burian	Williamson	John C. Lawson	Williamson
Monongalia	John H. Trotter	Morgantown	Clark K. Sleeth	Morgantown
Ohio	H. G. Weiler	Wheeling	J. D. Bird, Jr.	Wheeling
Parkersburg Academy	S. Wm. Goff	Parkersburg	Logan W. Hovis	Parkersburg
Potomac Valley	R. W. Love	Moorefield	M. H. Maxwell	Moorefield
Preston	W. P. Johnson, Jr.	Arthurdale	C. Y. Moser	Kingwood
Raleigh	B. K. Peter	Beckley	Fred Richmond	Beckley
Summers	W. L. Van Sant	Hinton	D. W. Ritter	Hinton
Taylor	T. W. Heironimus	Grafton	Paul P. Warden	Grafton
Wetzel	F. E. Martin	New Martinsville	A. M. Dyer, Jr.	Pine Grove
Wyoming	C. T. Upchurch	Kopperston	J. F. Biggart	Mullens

County Society News

CABELL

J. R. Bowman, M. D., pediatric surgeon, of the Bowman Carpenter Clinic at Johnson City, Tennessee, was the guest speaker at the regular monthly meeting of the Cabell County Medical Society held April 8, at the Hotel Prichard, in Huntington. His subject was "Recent Advances in Pediatric Surgery."

At the business meeting following the scientific program, the society again went on record as approving the merger of the Huntington and Cabell county health units.

THOMAS B. BAER, M. D.,
Secretary.

* * * *

FAYETTE

A series of cases of lung abscess was presented by Dr. W. E. Bundy, of Oak Hill, before the regular monthly meeting of the Fayette County Medical Society, held at the Hotel Hill, in Oak Hill, April 6. The paper was discussed by Dr. Phillip Oden, also of Oak Hill.

At the business meeting following the scientific program, Dr. G. L. Morin, of Kimberly, was elected to membership. The following resolution was adopted:

"The Fayette County Medical Society wishes to go on record as being in favor of state subsidization of all beds in state tuberculosis hospitals and that copies of this resolution be sent to Mr. Charles Lively, Secretary, West Virginia State Medical Association, the Council of the West Virginia Medical Association and/or the House of Delegates, and Mr. E. P. Wells, Secretary, West Virginia Tuberculosis and Health Association."

C. B. HUGHES, M. D.,
Secretary.

* * * *

FORT HENRY ACADEMY OF MEDICINE

John H. Gibson, Jr., M. D., professor of surgery and director of surgical research at Jefferson Medical College, Philadelphia, presented a paper on "Surgical Treatment of Common Chest Lesions" at the regular meeting of the Fort Henry Academy of Medicine, at Wheeling, March 30, 1948. The discussion of Doctor Gibson's address was led by J. S. Gaynor, M. D., of Wheeling.

D. E. GREENELTCH, M. D.,
Secretary.

* * * *

KANAWHA

Kenneth L. Pickrell, M. D., associate in surgery at Duke University, and in charge of plastic surgery at Duke Hospital since 1944, was the guest speaker at the regular monthly meeting of Kanawha Medical Society, held at the Hotel Daniel Boone, in Charleston, April 13, 1948. His subject was "Treatment of Burns."

At the business session following the scientific program, Dr. Edward V. Henson, of South Charleston, was elected a member of the Society.

The following delegates and alternates were elected to the annual meeting of the House of Delegates at Huntington, May 10-12, 1948: Delegates: John W. Hash, Pat A. Tuckwiller, John E. Lutz, E. W. Squire, Paul H. Revercomb, H. M. Escue, W. C. Stewart, Howard A. Swart, A. A. Wilson, Bert Bradford, and H. M. Beddow. Alternates, T. P. Mantz, W. E. Hoffman, A. C. Chandler, N. H. Newhouse, Russel Kessel, L. B. Matthews, W. B. Rossman, Marion F. Jarrett, A. B. Bowyer, Geo. O. Nelson, and H. R. W. Vial.

JOHN W. HASH, M. D.,
Secretary.

* * * *

LOGAN

Dr. W. A. Thornhill, of Charleston, was the guest speaker at the regular monthly meeting of the Logan County Medical Society, held March 10, at the Aracoma Hotel at Logan.

Doctor Thornhill presented an excellent paper on therapeutics, including a comprehensive resume of the anti-histamine drugs and the newer drugs recently released for use. He also discussed drugs still under investigation, but not yet approved.

I. M. KRUGER, M. D.,
Acting Secretary.

* * * *

MARION

Dr. A. G. Evans, Marion County health officer, was the guest speaker at the regular monthly meeting of the Marion County Medical Society, held March 30, at the Fairmont General Hospital, in Fairmont.

Doctor Evans discussed present and contemplated services of the local health unit, and changes in the regulations concerning communicable diseases. He also discussed present and proposed clinics in Marion County.

GEORGE T. EVANS, M. D.,
Secretary.

* * * *

MERCER

J. Edwin Wood, M. D., clinical professor at the University of Virginia Department of Medicine, Charlottesville, was the guest speaker at the regular monthly meeting of the Mercer County Medical Society held March 17, at the Pinnacle Restaurant, in Bluefield. He discussed the use of low sodium diet in heart failure and high blood pressure. The paper was discussed by Drs. Upshur Higginbotham, O. G. King, and J. R. Shanklin.

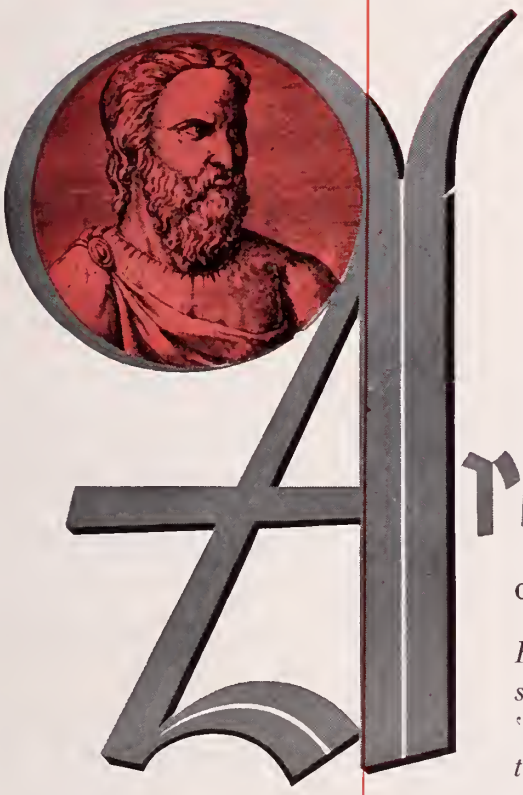
FRANK J. HOLROYD, M. D.,
Secretary.

* * * *

MONONGALIA

Frank J. Gregg, M. D., assistant professor of medicine at the University of Pittsburgh School of Medicine, and chief of the cardiac service of the Children's Hospital and of the Pittsburgh diagnostic clinic, was the guest speaker at the regular monthly meeting of the Monongalia County Medical Society, held April 6, at Morgantown. He presented a very interesting paper on "Pathologic Physiology and Rational Treatment of Mitral Diseases."

MILESTONES IN CARDIORESPIRATORY HISTORY



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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Drs. E. F. Heiskell, Eldon B. Tucker, and Clark K. Sleeth were named delegates to the annual meeting of the House of Delegates at Huntington, May 10-12, 1948. Drs. C. C. Romine and L. M. Strawn were elected alternates.

CLARK K. SLEETH, M. D.,
Secretary.

* * * *

OHIO

Dr. C. J. Holley, of Wheeling, presenteed the Jacob Schwinn Scientific Lecture at the regular monthly meeting of the Ohio County Medical Society, held April 6, in Wheeling. His subject was "The Babcock-Bacon Operative Technique for Carcinoma of the Bowel."

The guest speaker was Dr. Thomas Bess, of Keyser, president of the West Virginia State Medical Association, who was paying his official visit to the Society. Doctor Bess discussed several pertinent subjects interesting to the members, and strongly advocated the establishment of a four-year school of medicine in West Virginia.

HOWARD G. WEILER, M. D.,
President.

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Obituaries

EDWARD DAVIS, M. D.

Dr. Edward Davis, 72, of Salem, died April 11, at his home in that city following a long illness.

Doctor Davis received his M. D. degree at the Miami Medical College, Cincinnati, Ohio, in 1908. He was licensed to practice in West Virginia that same year.

He served as captain in the Army Medical Corps during World War I, and was in command of a field hospital in France. He had been a member of the Harrison County Board of Education for the past fourteen years.

Doctor Davis was an honorary member of the Harrison County Medical Society, the West Virginia State Medical Association and the American Medical Association.

* * * *

WILLIAM HOYE KUNST, M. D.

Dr. William Hoye Kunst, 82, of Fairmont, died at his home in that city March 29, 1948, following a long illness. The immediate cause of his death was pneumonia.

Doctor Kunst was born in Grafton, May 26, 1866. He received his M. D. degree at Starling Medical College, Columbus, Ohio, in 1891. He located the same year at Point Marion, Pennsylvania, and moved to Fairmont in 1894, where he continued in general practice until his retirement a few years ago.

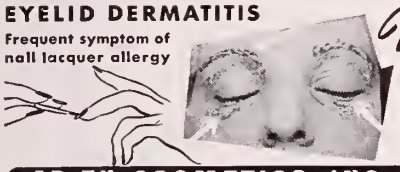
During his years of practice in Fairmont, he served as secretary of the federal board of pension examiners and as a medical examiner for several insurance companies. He was a former member of the Marion County Medical Society, the West Virginia State Medical Association, and the American Medical Association. The deceased is survived by one brother, Frederick Kunst, of Grafton. His wife, Mrs. Fanny (Rich) Kunst, died in 1947.

* * * *

FRANK KANE LYON

Dr. Frank Kane Lyon, 72, of Parsons, died April 9, of coronary disease, at his home in that city. He had been a practicing physician in Tucker county for 26

EYELID DERMATITIS
Frequent symptom of nail lacquer allergy



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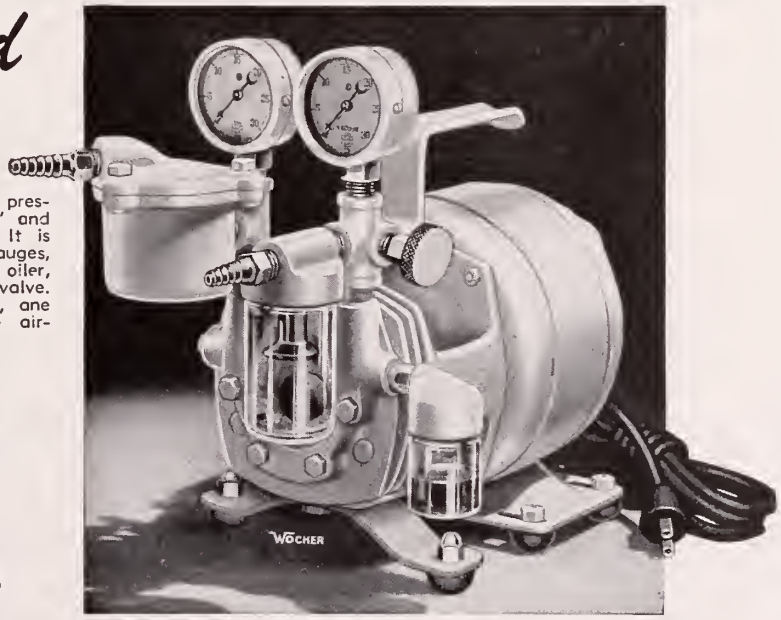

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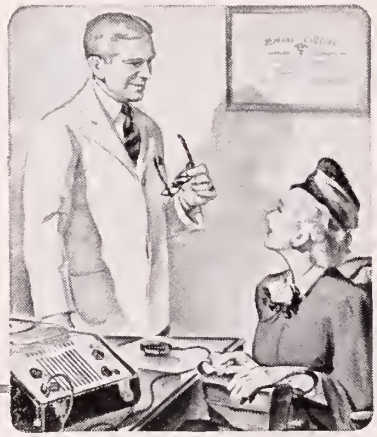

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years. At the time of his death he was a member of the staff of the Tucker County Hospital.

Doctor Lyon received his M. D. degree at the University of Pittsburgh school of medicine in 1903, and was licensed to practice medicine in West Virginia that same year. He had served five terms as health officer for Tucker county.

He was a member of the Barbour-Randolph-Tucker Medical Society, the West Virginia State Medical Association, and the American Medical Association.

* * * *

HUGH GIDEON NICHOLSON, M. D.

Dr. Hugh Gideon Nicholson, 76, formerly of Charleston, died April 12, 1948, at his home in San Diego, California. Death was attributed to angina pectoris, from which he had suffered for several months.

Doctor Nicholson was born August 29, 1871, at Oakville, North Carolina. He was a pharmacist for several years in North Carolina and Virginia before he received his M. D. degree in 1897 at the Medical College of Virginia. He was licensed to practice in West Virginia in 1898, and accepted appointment as superintendent and surgeon-in-charge of the Sheltering Arms Hospital, at Hansford. He resigned in 1902, to engage in private practice in Charleston. He was married in 1903, to Roberta Coleman, of that city.

Doctor Nicholson practiced his specialty of surgery in Charleston until 1929, when he accepted an appointment with the United States Public Health Service at Sitka, Alaska. He had lived in San Diego since 1942.

Doctor Nicholson served as treasurer of the West Virginia State Medical Association for eighteen years. He was a Fellow of the American College of Surgeons.

Besides his widow, he is survived by a son, Hugh G. Nicholson, Jr., of Oxnard, Calif.; a daughter, Mrs. George Cerviney, of New York City; and a brother, Dr. Gwynn Nicholson, of Charleston.

* * * *

JOHN EMERSON WHITEHILL, M. D.

Dr. John Emerson Whitehill, 64, formerly of Huntington, died March 23, 1948, at his home in South Bend, Indiana.

Dr. Whitehill received his M. D. degree at the University of Illinois College of Medicine in 1907. He was licensed to practice in West Virginia in 1921.

Dr. Whitehill was formerly located at Hemphill, Earling, Gary, and Logan, and for a short time prior to World War II, was a member of the staff at Weston State hospital.

At the time he left West Virginia, he was a member of the McDowell County Medical Society, the West Virginia State Medical Association and the American Medical Association.

BRIDGEPORT HI WINS NTA AWARD

The National Tuberculosis Association has announced that the Bridgeport (W. Va.) High School has been awarded a certificate of merit for outstanding participation in the 11th Annual School Press Tuberculosis Project conducted in 1947 by the NTA, its affiliated associations, and the Columbia Scholastic Press Association.

Book Reviews

TREATMENT IN GENERAL PRACTICE—By Harry Beckman, M. D., Professor of Pharmacology, Marquette University School of Medicine, Milwaukee, Wiscansin. Sixth Edition. Pp. 1129. Philadelphia and Landon. W. B. Saunders Company, 1948. Price, $11.50.

The appearance of the sixth edition of this very practical book is proof of its excellence and popularity. In his preface to the first edition, the author states that the true authors are the men and women whose names appear in the bibliography (which is excellent) and that he looks upon himself as the editor of their work. This edition contains many references to articles published in 1947. Many of the sections have been rewritten, and several new entities included.

The only criticism this reviewer has is that the book is getting too large, having grown 350 pages in the last three editions. The long discussions on the ligation of the saphenous vein, the Smithwick operation, etc., seem out of place in a book intended for general practitioners.

The book is written in an easy, very readable, at times humorous style. If there is controversy on treatment, all sides are presented. It is probably the most valuable and will be the most frequently used book a general practitioner can own.—Frank J. Holroyd, M. D.

A TEXTBOOK OF CLINICAL NEUROLOGY—By Israel S. Wechsler, M. D., Clinical Professor of Neuralogy, Columbia University, New York City; Neurologist for Mt. Sinai Hospital, and Consulting Neourologist for Montefiare Hospital, and Rockland State Hospital, New York. Sixth Edition. Pp. 829, with 162 illustrations. Philadelphia and London. W. B. Saunders Company, 1947. Price $8.50.

In accordance with the policies of the previous editions, the author sets forth again the concepts that a textbook of neurology should, in so far as possible, contain all the factual material available in the field of clinical neurology which would be of constructive use to the physician. In his preface he makes this point clear by alluding to the vast and as yet undiscovered areas of neurology. His aim to broaden and enlarge this present edition, by the inclusion of newer factual material and by the revision of material previously presented, has been gratifying.

This reviewer was impressed by the revision of the chapter, Psychometric Testing, to its broader and more practical applications in the field of psychological diagnosis and the subject of adjunct service for uncovering special abilities in the patient himself hitherto undisclosed by clinical examination. Other features of the book which indicate the modesty of the author were the scientific discussions, devoid of bias, regarding the treatment in certain debated fields such as the convulsive states, acute anterior poliomyelitis, neuralgia and the cerebral palsies.

As usual, the author has included a chapter on the recognition and treatment of the neuroses which, like

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Surgery of Colon & Rectum, One Week, Starting May 24, June 14.
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UROLOGY—Intensive Course, Two Weeks, Starting September 27.

FRACTURES & TRAUMATIC SURGERY—Intensive Course, Two Weeks, Starting June 7.

OPHTHALMOLOGY—Intensive Course, Two Weeks, Starting May 10. Ocular Fundus Diseases, One Week, Starting June 7.

GYNECOLOGY—Intensive Course, Two Weeks, Starting June 7, September 13. Vaginal Approach to Pelvic Surgery, One Week, Starting June 21.

MEDICINE—Intensive Course, Two Weeks, Starting June 7.
Personal Course in Gastroscopy, Two Weeks, Starting June 28, July 12.
Electrocardiography & Heart Disease, Two Weeks, Starting August 2
Hematology, One Week, Starting May 10.
Gastroenterology, Two Weeks, Starting May 24.

DERMATOLOGY—Formal Course, Two Weeks, Starting June 7. Clinical Course Every Two Weeks.

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those in previous editions, is oriented on a psychoanalytic plane. The author recognizes that the psychoanalytic orientation presented in this chapter may be a target for criticism when he states that proponents and antagonists of Sigmund Freud spend most of their time rejecting him (Freud) for what he believed which did not particularly coincide with their own personal ideas.

This book was written not for the specialist, not for the general practitioner, but for the physician—that individual whose quest for a broadening of his own clinical resources can be answered only by completeness and by fact.—W. B. Rossman, M. D.

ALLERGIC HEADACHE

Allergic migraine has been postulated as a reaction to contact with an allergen, usually a food, although inhalants have been incriminated. These headaches are recurrent, may be unilateral, are accompanied by visual and gastro-intestinal disturbances, and by pain of varying intensity. The attacks are not infrequently preceded by an "aura," and, if treatment is instituted early, the severe symptoms may be aborted.

Headache secondary to nasal obstruction, which may be the so-called "sinus," "vacuum," or "frontal" headache, is relieved by shrinking the nasal mucous membrane.—J. Warwick Thomas, M. D., in Virginia Medical Monthly.

DIABETES ABSTRACTS*

Robert L. Jackson and Helen G. Kelly: "Growth of Children with Diabetes Mellitus in Relationship to Level of Control of the Diabetes." Proc. Am. Diabetes Assn. VI: 437, 1946.

Adequate control of juvenile diabetes consists of preventing insulin reactions and keeping the urine sugar free while on a normal diet. The authors reviewed the records of one hundred and thirty four juvenile diabetes for an average of five years to determine whether or not this high level of control was particularly advantageous to growth. All patients kept an accurate record of their insulin, fractional urinalyses, insulin reactions, infections, emotional upsets, and variability in exercise or diet. Those classed as being under "very good control" showed urine specimens free from sugar at all times with the exception of very occasional traces and had only very occasional mild insulin reactions. "Good control" consisted of the urines free from sugar except for occasional traces and occasional insulin reactions. "Fair to good"—more than one half the urine specimens were free from sugar with minimal glycosuria in the remaining specimens and occasional insulin shocks of varying degrees. "Poor"—continuous glycosuria and occasional insulin shocks.

***The opinions expressed in these abstracts do not necessarily reflect the views of the members of the Diabetes Committee of the West Virginia State Medical Association.**

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The authors noted that many writers had questioned whether or not the available norms were suitable to evaluate the growth of one particular group. Since the study was carried out in Iowa, Growth Charts were used for this study. This chart is one taken from general pediatric practice in Iowa, the subjects of which were favored by good environment. The background of the diabetic children studied was similar to those who made up the list of norms.

Eighty-six of the diabetics were admitted within six months of the onset of diabetes and it is conceded that within six months the disease could have had its effect on height. When first seen, the heights of forty-two per cent deviated less than plus-minus one standard deviation from the average normals; forty-one per cent were one or more standard deviations below the norm and seventeen per cent were one or more standard deviations above the average height for age. The interpretation was that the greater number of shorter children than expected was due to failure to grow properly under their former regimen.

Fifty-four patients comprised the group with early onset of diabetes and with records for at least two years prior to the age of ten. Observations on this group were thus during the period when growth is relatively slow and linear. The other group (ninety-three children) were older than ten, when there is normally a spurt of growth. The latter group was difficult to evaluate since growth for normals was unpredictable at that age.

Numerous growth studies previously reported revealed that while compensated diabetes was compatible with normal growth many diabetic children do not grow normally. The method outlined by the authors studies growth not only in relation to others but as the patient establishes and maintains his own growth pattern. White and Bogan had found no relationship between retardation of growth and level of control of the disease but consider a child in very good diabetic control if he is excreting no more than 10% of his ingested carbohydrates. The authors would consider such a patient in poor control. In the series presented acceleration of growth occurred only when the patients were receiving an adequate diet and maintained a good level of diabetic control. The majority of recent studies reported in the literature consisted of children receiving adequate diets but under less rigid levels of control. Children under good to excellent control had a better chance to accelerate than those in lower levels. Many of those in poor or fair control grew less than expected.

Erratic growth was more frequent for children in fluctuating levels of control. Girls tended to maturate later if they were in poor control. When the onset of diabetes was between the ages of ten to fourteen years it often delayed the onset of the menarche. Girls with the onset of diabetes before the age of nine years and who were under good or excellent control maturated normally. For children already stunted from improper care the importance of complete management was established as a means of ameliorating retardation of growth and development.—G P.H.

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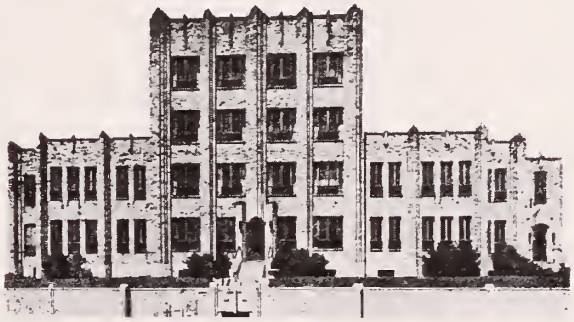

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Woman's Auxiliary

PRESIDENT'S MESSAGE

We are nearing the close of our year's work, and for each member I have but admiration and deep affection for cooperation in our program. Our theme, "Service for our Watchword," has been made evident in the many hours you have given to the work of the Auxiliary for the advancement of health in your community. I cannot express in mere words my deep appreciation for the very fine help that has been given me by officers, committee chairmen and county presidents. I have but one last official request, and that is that you meet with us in Huntington, May 10-12, for the annual Convention of our State Auxiliary.

Special thanks are due Dr. Thomas Bess, Dr. Wade H. St. Clair, and the members of our Advisory Board, Dr. Hu C. Myers, Dr. Harry V. Thomas, Dr. John P. Helmick, Dr. Ulysses G. McClure and Dr. F. Carl Chandler, who have given generously of their time in support of our endeavors. They have been most understanding in their discussions of our problems, and their help has been invaluable.

Sincere appreciation to Mr. Charles Lively for his many courtesies and cooperation in our Auxiliary affairs, and to the Publication Committee for the space given the Auxiliary in the West Virginia Medical Journal.

It is an honor and a privilege to serve as the president of the Woman's Auxiliary to the West Virginia State Medical Association, and I hope the Auxiliary has been of service to our parent organization in promoting and upholding the ideals of American medicine.

To our incoming president, Mrs. W. E. Hoffman, I wish Godspeed and pledge our continued teamwork and cooperation in the spirit of service to humanity.

MRS. F. CARL CHANDLER.

* * * *

MORRIS MEMORIAL LUNCHEON

You will not want to miss the Luncheon at the Morris Memorial Hospital, at Milton, Monday Noon, May 10. Mrs. V. Eugene Holcombe, president of the Woman's Coordinating Board to the Hospital, and one of our past state presidents, is very anxious to help entertain the doctors' wives attending the convention. Elaborate plans are being made for this luncheon—every doctor's wife is invited to attend as the guest of the Board. Reservations should be mailed to Mrs. V. E. Holcombe, 301 Riverview Terrace, Charleston, W. Va., by May 5.

* * * *

WOMAN'S AUXILIARY AT CHICAGO

The annual meeting of the Woman's Auxiliary to the American Medical Association will be held at Chicago, June 21-25, conjointly with the American Medical Association convention in that city. Mrs. Eustace A. Allen, the president, will preside.

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A tea in honor of Mrs. Allen is scheduled for Monday, June 21, in the Century Room at the Hotel La Salle, and the convention will be opened formally Tuesday morning, at nine o'clock, at which time the president elect, Mrs. Luther Kice, will be presented. The annual address of the president is scheduled for this session. Morris Fishbein, M. D., editor of the Journal of the American Medical Association, will be the guest speaker at the noon luncheon.

Reports of state presidents will be received at the Wednesday morning session, and Edward L. Bortz, M. D., president of the American Medical Association, R. L. Sensenich, M. D., president elect, and George F. Lull, M. D., secretary and general manager, will be the guest speakers. The new officers will be installed at the afternoon session.

The convention will end on Thursday, with the annual dinner in the Grand Ballroom at the Hotel La Salle, at 6:30 P. M.

* * * *

EASTERN PANHANDLE

Mrs. C. G. Power, of Martinsburg, was elected president of the Woman's Auxiliary to the Eastern Panhandle Medical Society at the organization meeting held March 10, 1948, in Martinsburg.

Other officers were named as follows: President elect, Mrs. Andrew E. Zepp; vice president, Mrs. John H. Kilmer; secretary, Mrs. D. J. Shaw; and treasurer, Mrs. G. J. E. Sponseller. All of the officers reside in Martinsburg.

MRS. D. J. SHAW,
Secretary.

HARRISON

William B. Terhune's, "The Doctor's Wife," was the subject of a review by Mrs. George F. Evans at the regular monthly meeting of the Woman's Auxiliary to the Harrison County Medical Society, held at the Waldo Hotel, in Clarksburg, April 1, 1948.

At the business meeting held following Mrs. Evans' review, Mrs. Lynwood D. Zinn, of Clarksburg, was elected president for the ensuing year. She succeeds Mrs. James C. Repass, of Lumberport.

Other officers were elected as follows: President elect, Mrs. Lawrence H. Mills; vice president, Mrs. Richard K. Hanifan; secretary, Mrs. Jack Gocke (reelected); and treasurer, Mrs. E. Ross Allen. The new officers will be installed at the June meeting.

MRS. JACK GOCKE,
Secretary.

ALCOHOLISM

A notably complex entity, alcoholism has not yet yielded to the necessarily incomplete approaches of the past. At least one impediment has been the emotionalism which traditionally surrounds the problem of alcohol. This factor has often discouraged scientists in their efforts and no doubt is in part responsible for the indifferent progress made until recently. The wide publicizing of the concept that alcoholism is a disease is therefore socially useful. Acceptance of this concept by the general public will render it increasingly possible for medicine and related sciences to assume the primary role which should be theirs in the solution of the problem of alcohol.—Ex.

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WEST VIRGINIA IS READY FOR A FOUR YEAR MEDICAL SCHOOL*

By THOMAS BESS, M. D.,
Keyser, W. Va.

The subject of my address tonight, "West Virginia is Ready for a Four Year Medical School," was selected as the result of my visitations to every county medical society in West Virginia. Upon the occasion of these visits, I talked with the officers and members concerning the problems of organized medicine in this state.

Before I begin the discussion of my subject, I would like to say a word or two of deep personal appreciation. You cannot possibly know how I feel tonight. The realization that I stand before you as your president, feeling so completely incapable of serving you, leaves me with one consoling thought,—that I must have friends who can appreciate the weakness and frailties of man and at the same time give him credit for any strength he may display on occasion. Truly, I want to thank each and every one of you from the bottom of my heart for bestowing upon me the highest honor that can come to any member of our organization.

As I consider the problems of medicine today and seek their solution, I am reminded of some Greek mythology. There was a mortal named Sisyphus who was compelled to spend eternity rolling a stone up a hill. The disconcerting thing about his task was that the stone, if released, would roll back down and crush him so that he had to struggle with it continually. The old myths and legends are but symbols of human experience. This one about Sisyphus is no exception. All of us must eternally keep pushing if we do not want the massive weight of indifference and retrogression to overpower us.

As you know, there are two types of medical schools in our country today: those that are maintained from state funds, and those maintained from funds arising from sources such as endowments, grants and tuition fees from students.

Information from various sources discloses that state supported medical schools have more applications for registration than they can possibly accommodate. The tendency on the part of these schools is to accept only residents of that state; therefore, the remark that a medical school has been built up "around the state" appears to be aptly put.

I am not reporting anything new when I tell you that we have considerably more students, all bonafide residents of West Virginia, seeking enrollments in our school of medicine than we can possibly accommodate. Each year the selection of the freshman class for this school presents a major problem for the school authorities.

In a recent conversation with the chairman of the committee on admissions, I was told that he is deluged on all sides and from every section of the state by letters, pleas and suggestions from friends that students be given consideration.

Nearly every year there is a different system developed for the selection of students for the freshman class. I know, and you know, that our committee on admissions is making every possible effort to determine the attributes of the individual that are conducive to the proper pro-

*Annual Address of the President, West Virginia State Medical Association, 81st Annual Meeting, Huntington, West Virginia, May 10, 1948.

gram in the study of medicine. In other words, our present problem of medical education in West Virginia is one that we are not even partially solving.

We are all familiar with the history of and the facts relating to the establishment and conduct of the present two year school of medicine at West Virginia University. In all the years it has existed, it has not been considered by the university faculty as one of its outstanding units. Consequently, when the question of advancement of education in general is considered, our medical school has on a number of occasions had to suffer the brunt of a cut in appropriations and the disallowance of extension of facilities to the extent that on several occasions the grading of the school has been in jeopardy.

There have been many occasions in the past when our citizens, laymen as well as doctors, have given consideration to the establishment of a four year school of medicine in West Virginia. In every instance when the subject has been brought up for consideration, there has been so much controversy that the whole matter has had to be postponed time and time again. There must be united effort if we are to take our place among the states providing complete medical education for their students.

After a half-century of mobilizing and demobilizing the strength of this country, and with the idea that quality is more to be desired than quantity, Dr. Thomas Parran, who has just recently retired as surgeon general of the United States Public Health Service, urged the country's medical schools to increase the number of graduates by fifty per cent. He made this appeal at a time when many schools are jammed to the rafters and many more in financial straits. Many of our citizens have come to the conclusion that more medical schools must be built if we are to obtain the desired results. If this view were to prevail, it would result in a new twist to the curve representing the number of medical schools and basic science schools in this country. Since the turn of the century, that curve has sagged suddenly from 160 medical schools to its present 77 schools in America.

There are definite signs that this trend might indeed be reversed. Six of the seven basic science schools have been mulling over the idea of expansion into four year schools of medicine. Reports indicate that the University of Mississippi and the University of South Dakota have decided that the time is ripe for the establishment of four year medical schools, and that West Virginia is still on the fence. But, planning goes on, with legislative approval in the University of Missouri, North Carolina, and North Dakota, where entirely new medical schools are in the offing. The University of Florida has received legislative sanction to establish a medical school at Gainesville, and the University of Miami is making a preliminary survey. Other universities interested in adopting a new medical school include Rutgers, University of Maine, Wyoming, Connecticut, and U. C. L. A.

The steady decrease in the number of medical schools has been no accident. It reveals a prolonged clean-up in the American medical school system spearheaded by the American Medical Association's Council on Medical Education and Hospitals, and the Association of American Medical Colleges. Before medical educators clasp the new-school idea to their bosoms, they want some assurance that reversing the half-century trend won't mean cutting corners on quality. Some of them remember the sorry state of medical education in 1905, when there were 160 medical schools. Quoting Dr. Victor Johnson, former secretary of the Council on Medical Education and Hospitals, "Almost anybody could open a medical school in those days, and almost everybody did. Tuition not only paid for cheap instruction that was given, but also lined the pockets of too many instructors and administrators. A few schools were of high calibre, but most were not."

This great change in the trend during the past fifty years did not come about by legislation of a political nature, but by the organization of physicians themselves, i.e., the American Medical Association. As we began to consolidate and show that better schools and better instruction would result, most of the states began to consider legislation that would result in the licensure of only the students who were graduated from the "A" class type of school. It is interesting to note, however, that in 1905, with 160 medical schools, 5,606 students were graduated; in 1947 with 77 medical schools, 6,389 students were graduated. To guide the educators and advisors today, and looking forward to the future, we are told that in 1960 unless something is done to increase the number of graduates of class "A" schools, it will be utterly impossible for us to supply the demand for doctors and nurses in the public health service and the veterans administration, and, just as important, the rural areas. Some of the urgent questions that come before the profession today are: (1) Do we need more medical schools? (2) How can we finance them? (3) How can we keep the standards high? I think the answer

to these questions is that we do most certainly need more medical schools; that the question of finance should be left entirely to state legislative bodies; that standards need not be lowered if we adhere to the policy of grading schools in force today.

The question often is asked, "Is there a definite trend for the establishment of new medical schools?" We might answer that the recognition of the important role medical schools must assume in future health and medical care programs, together with an apparent increased demand on the part of their students for opportunities to undertake the study of medicine, has stimulated a number of state universities to consider the development of new medical schools.

An additional objective in certain instances apparently has been to provide an adequate number of doctors for all areas of the state. Some universities are planning the development of existing two year schools into full, four year medical schools. Others are planning medical schools as new ventures in their educational programs.

It might be well here to state that West Virginia is one of the seventeen states of the nation which do not have a four year medical school. We have had a half-century's experience with a two year school of medicine, but it is obvious that the mere establishment of a four year medical school will not in itself solve the medical care problems of the states, and we must remember that the proposed development of a new medical school is a matter of grave concern to American medicine. In certain areas, if properly developed and adequately supported, the four year medical school can make a real contribution to medical education, to medical research, and to the practice of medicine in the region in which it is located. Therefore, it is of the utmost importance that any program for the development of a new medical school include a careful study of all the factors essential to a satisfactory program of medical education.

Without question the two most important basic essentials are adequate financial support and the ready availability of clinical cases, both in a well conducted hospital and in an outpatient department. Any new school will be greatly handicapped in this development unless clinical cases are ample and sufficiently varied to meet the requirements of all its departments. The ready availability of clinical material, together with an adequate clinical faculty, explains why most of our successful medical schools are located in metropolitan areas. Furthermore, a medical school should be developed as an integrated whole. The geographic separation of the basic science departments and the clinical facilities has been found to be inconsistent with a well coordinated program of medical education.

One of the first problems which confronts a university in connection with a program for the development of a medical school is its geographic, organizational and administrative relationship to the university and its other schools. These are problems which are complicated and which require careful study. Their solution will vary in different institutions, depending upon a host of related factors.

When all other requirements can be met, there is no question that there are advantages in the location of a medical school on a university campus. These advantages include close contact with the administrative departments of the university, with its building and grounds departments, interlibrary service, and close relationship with certain of the departments of the medical university. Such departmental proximity, although theoretically sound, probably at times has been overemphasized. Frequently, medical school departments report that the departments of the other schools of the university are too busy with their own problems to be of any material assistance. They believe that they make more satisfactory progress by bringing into their medical school departments such chemists, physicists or others from the pure science departments as they may need in connection with their specific problems. However, the proximity of departments is undoubtedly of advantage in connection with interdepartmental seminars and graduate programs in such departments as biochemistry and anatomy.

On the other hand, there are certain hazards in connection with the location of a medical school on a general university campus. It may lead to placing upon the departments of a medical school the responsibility of teaching students from other schools of the university, including physical education, pharmacy, nursing, and home economics. In fact, it may lead to the development of university departments which merely serve the medical school as one of the schools of the university.

Medical education is a serious business and involves enormous public responsibilities. The medical curriculum must be developed as a closely integrated whole, and the faculty usually has all it can do to meet its responsibilities to medicine alone. It is also becoming increasingly important that all the facilities and laboratories of the medical school be available to medical

students at all times and not merely during scheduled hours.

It is not justifiable to say that no medical school can serve to advantage students from another school of the university. Given adequate laboratory facilities and adequate, experienced and interested departmental staffs, such courses can be satisfactorily developed. However, it is usually found that the departmental staffs are not adequate to assume such additional responsibilities, nor do they have any particular interest in other than medical students and their own graduate students. Under such circumstances, any effort expended in teaching other than medical students detracts from their medical teaching and research.

All of what has been said should in no way be interpreted as minimizing the contributions which nonmedical university departments such as physics, chemistry, biology, psychology and even mathematics have made to the advancement of medicine and medical education. Neither should it be interpreted as a failure to realize the need of many nonmedical students for certain aspects of subjects included in the medical curriculum. This need probably can be best met by using as teachers persons experienced in the field for which the student is preparing. Such teachers should have a full appreciation of the needs of the student and the objectives and implications of his studies in his particular field.

Although there are many other factors which should be carefully studied by a university contemplating the development of a program of medical education, the basic considerations are the need for a new medical school, the assurance of continuing adequate financial support, and the ready availability of adequate clinical facilities, fully and unquestionably available to the medical school for teaching and research.

The program should involve the development of the school as an integrated whole with no geographic separation of the basic science departments, the clinical departments and the clinical facilities. In certain instances all of these considerations may be met with the location of the school on the university campus. If not, it is important that the whole medical school be developed in immediate proximity to the clinical facilities to be used for teaching and research.

Granting competent administration, a university should have no fears in regard to the future of a medical school simply because it is not developed on its own campus. A number of the best medical schools in this country have developed successfully under such circumstances.

There is no question that forty years ago when there were many low grade proprietary medical schools there was a definite need for the stability and educational standards such as could best be guaranteed in connection with close supervision of the schools by established universities. The conduct of a medical school as an integral part of a university still assures a stability in its administrative and financial activities which is so important to its continued development.

However, it should be recognized that medical education has made remarkable progress, has become mature and should be capable of standing on its own feet.

If medical educators appear selfish and jealous, it is only because they realize their responsibilities and are jealous of the health and medical care of the public.

It is extremely difficult to determine whether there is actual need for additional medical schools in terms of providing a larger number of physicians. Today we have a higher ratio of physicians to population in the United States than is found in any other country. However, this is a matter which deserves careful study.

Certainly the establishment of new medical schools will not alter the present unfortunate concentration of physicians in the urban areas. Only by providing facilities for high grade medical service, and arranging adequate remuneration for services, will physicians be attracted to the more sparsely settled areas of a state.

In certain instances it is possible, of course, that the money required for the development and continued support of new medical schools might be better spent in providing adequate facilities to attract physicians to the areas in need of medical service.

The increasing number of students desiring to study medicine presents another serious problem. Medical education is so expensive and the responsibilities of the physician are so great that a high degree of selectivity of students is imperative if the medical schools are to meet their responsibilities to the public. The Association of American Medical Colleges is renewing its efforts to find more dependable technics for evaluating the potentialities of applicants for admission to the medical schools of the country.

The problems of internships and residencies need careful study and reevaluation in terms of changing demands and changing educational requirements.

The statements I have just made cover the current problems in medical education as referable to our state. There has been a survey of medical schools in this country, and this undoubtedly will help to clarify many of our problems. We have a continuing liaison between the Council on Medical Education and Hospitals and the Association of American Medical Colleges, in cooperation with other interested national agencies, and the study has been careful and I am sure the solution of these problems will be intelligent.

Assuming that we succeed in having established a four year medical school in West Virginia, what would the responsibility of such a medical school be to the community which it serves? Probably little thought has been given in the past to the actual responsibility of the medical school to its community. Too often these responsibilities are accepted or rejected by succeeding generations without too much apparent alteration in the course of events of the college or the community which it is serving. Of course our first responsibility is to provide undergraduate medical education sufficient to enable us to graduate a certain number of doctors each year. The present distribution of physicians throughout the country is deplorable.

It must not be expected that the establishment and maintenance of a medical school in a state will solve the problem of distribution of physicians. Economic factors are potent determinants in the distribution of doctors from state to state, and in urban as against rural communities. Not only do the economically well-favored states and communities provide hospitals and diagnostic facilities required in the practice of modern medicine, but also they offer the physician better schools, churches, homes, stimulating intellectual and social contacts, and many of the other goods of life sought for themselves and their families, not only by physicians but by everyone else.

However the problem of doctor distribution may be solved, it remains that physicians must continue to be educated in undergraduate schools. However, this function alone might not justify maintaining a medical school. Certainly it alone would constitute insufficient justification for the large sums the state must spend to continue a school at a high level. To justify its existence, a medical school must be prepared to do many other things. Let's be specific:

1. HOSPITAL EDUCATIONAL PROGRAMS.—A medical school must provide leadership in organizing hospital training facilities in its own hospitals and in other hospitals throughout the state. Such educational opportunities must be provided not only for undergraduate medical students but also for graduates, at the internship and the still more advanced hospital residency levels.

One of the missions of the medical school is to improve the quality of intern and resident training throughout the community or state by collaborating with hospitals not directly connected with the medical school.

There are two by-products of this medical school function which are far too important to be overlooked. First, the quality of medical care rendered to patients is always improved in a hospital conducting an educational program for medical students, interns or residents. Secondly, the location of a medical graduate's hospital of internship has proved to be an important factor in determining where he will practice. Communities or states desiring to attract practicing physicians will be materially assisted by the establishment and maintenance of acceptable internships. This can best be effected under the leadership of a good medical school.

2. ADVANCED TRAINING OF PHYSICIANS.—A physician who ceases to learn ceases to be a good physician. Opportunities for such learning come from several sources. It is the responsibility of the medical school to provide such opportunities as can be best furnished by a medical school. Advanced training is primarily in one of the two following categories: postgraduate continuation training, and hospital residency training.

Continuation training may be in the form of conferences, lectures, seminars, special clinics or organized courses, either at the medical school and its own hospital, or elsewhere in the state. There has been a sharp increase in courses offered by medical schools since the war, so that thirty to forty thousand physicians throughout the country attend one or more continuation, review or refresher courses during the year. In this way, again, a medical school contributes to the improvement of medical care for the people.

Hospital residency training programs are being conducted in various special fields of medicine in all medical school hospitals. Under the aegis of the school, such training should be provided elsewhere as well. Resident training provides the state and the community with the services of specialists, supplementing the work of the general practitioners in furnishing the best medical care. At the present time, resident training in the specialties is especially required, since the advanced training of physicians was greatly cur-

tailed during the war. Two-thirds of the able-bodied men who graduated in recent years have had only nine months of hospital training after graduation, and only one-sixth of them obtained as much as twenty-seven months. Unless this educational deficit of the war is corrected, the quality of medical care in this country will suffer.

3. CARE OF VETERANS.—In the past the medical care afforded veterans in most veterans' hospitals was nothing short of scandalous. The Veterans Administration itself has fully recognized this fact, and has sought to improve the quality of care by effecting affiliations of veterans' hospitals, existing and projected, with medical schools. It was the desire and hope of Doctor Parran while head of the United States Public Health Service that most of the veterans' hospitals would be placed where they would be accessible to the activity and teachings of a medical school. The result should not only strengthen the medical schools, but should improve the quality of care provided veterans, who now constitute a considerable proportion of hospitalized patients in this country. It is reasonable to expect that now, as in the past, they will require hospitalization over a period of several years to come.

4. INTEGRATION OF HOSPITAL FACILITIES.—The best thinking today views hospitals not as isolated units, but as parts of a voluntary network of institutions, with the larger, better equipped and better staffed hospitals serving the smaller institutions, providing facilities and services which are not available to all hospitals, and assisting the outlying institutions to improve their work. Such cooperation is visualized in the implementation of the recently enacted "Hospital Survey and Construction" law, providing for state-wide surveys of hospital facilities and federal financial assistance for the construction of hospitals and health centers in areas needing them. In state surveys of hospital facilities, and in the subsequent voluntary integration of hospital services throughout the states, the medical schools should play a leading role.

5. SUPERIOR HOSPITAL AND MEDICAL CARE.—In the preceding discussions, frequent mention has been made of the improved hospital and medical care resulting from the establishment in a hospital of an educational program, whether this is at the medical undergraduate, internship, or residency level. This immediate by-product of education has been experienced universally, although it is not generally appreciated. It stems from the fact that the medical student, the intern, the resident and the attending physician or faculty member are parts of a team. In hospitals in which teaching is carried out, there is an atmosphere of mutual stimulation, of alertness, which is absent when teacher-student relationships are lacking. Students are skeptical, whether they be undergraduates or resident physicians. The attending physician is likely to be more thorough if he has to convince students of his views. He is more likely to keep up to date in all aspects of medicine. If he does not, he is sure to be reminded, by those he is teaching, of some scientific publication he has missed.

Usually, when the student-physician and his teacher disagree on a diagnosis or on the best therapy, the teacher is right. But the student is occasionally right in a dissenting opinion. This occurs sufficiently often to stimulate the teacher to make every possible effort and to give all possible thought in solving the problem presented by the patient. In such an atmosphere the patient is the beneficiary.

6. RESEARCH.—If it is to fulfill its mission, a medical school must carry out research. Since research is the very life of medicine, even the teaching of medical students requires a medical school faculty to be reasonably active in research. The student cannot understand medicine unless he understands research and is imbued with the spirit of research and discovery even though he is preparing for the general practice of medicine.

Without the spirit of research, without following research discoveries of others, the physician who may himself carry on no investigative work soon becomes hopelessly out of date. What may have been the best known treatment for a disease ten years ago might be gross malpractice today. He can catch this spirit only from teachers who themselves conduct some research.

The explanation of the unknown, the extension of the horizons of our knowledge about man in health and disease, are the responsibilities of every medical school. A school should devote itself to research problems for which it is particularly suited. For example, the high incidence of rheumatic fever in the Rocky Mountain area imposed on the University of Colorado the responsibility for an intensive study of this disease. An increased knowledge of this condition will be of great benefit locally. But research must not be viewed in such a purely provincial light.

When Banting and Best discovered insulin, when Whipple developed the liver treatment for pernicious anemia, when Wangensteen produced a new method of treating postoperative patients, each worked not only for the citizens of Toronto and Rochester and Minneapolis, but for the citi-

zens of Denver and Colorado as well. Similarly, it is incumbent upon Colorado to contribute through research to an increased knowledge of disease, not only for Denver and Colorado, but for the benefit of Canada and New York and Minnesota. Indeed, the results of research have a world-wide application. A medical school has a mission to perform, not only at home, but throughout the world, in a vast cooperative enterprise aimed at the understanding and control of disease.

Research is expensive. But it is interesting to note that a school with a good research record attracts outside funds in its support from the national government, the Office of Scientific Research and Development, the United States Public Health Service, the Army and the Navy, and the various foundations, drug concerns, and private individuals. Such grants from outside should stimulate people of a state to support an expanded program of research.

7. GUIDANCE IN PUBLIC HEALTH WORK.—Public health activities are aimed at the prevention rather than the treatment of disease, through improved sanitation, vaccinations against infections, and discovery and control of the sources of spread of tuberculosis and venereal disease. Such functions are primarily those of government, through its full time health officers, laboratories and field work facilities. But here again the medical school should play and is playing an important role, by providing counsel and guidance, coordinating the work, and making available the special facilities and trained personnel of the school. There are state medical schools in which the health department is housed at the school and the chief health officer is a member of the teaching faculty. Whatever the arrangement may be, the health department and the medical school should work in close collaboration, to the end that such diseases as tuberculosis and syphilis may be as well controlled in the future as are diphtheria and smallpox today.

8. PROVISION OF CONSULTATION FACILITIES.—The highly specialized equipment of a medical school and its highly trained and competent physicians and specialists should be available, on a consultation basis, to all of the doctors of the community or even of the state, so that puzzling cases may be referred to the medical school for opinion and advice or even treatment in some cases. In making such opportunities available, a medical school greatly improves the quality of medical care over a wide area.

9. ATTRACTING BETTER DOCTORS.—A community or state operating a medical school is likely to attract better doctors than one not so employed. Physicians like to teach and they recognize that there is no better way to keep up-to-date than by teaching. They strive to so improve their work that a faculty appointment will be warranted. The better physicians who may not desire to teach prefer to practice in a community with a medical school because of the stimulating professional contacts, the opportunities for advanced study and refresher and review work, and the availability of expert opinion in the consultation services of the school, in addition to the ready access to libraries, laboratories and diagnostic facilities. Again, the result is better medical care for the people.

10. TRAINING IN FIELDS ANCILLARY TO MEDICINE.—A medical school further contributes to an improved quality of medical practice by training individuals in fields ancillary to medicine, such as nursing, dietetics, x-ray technology, clinical and laboratory technology and others. The work of the physician is materially improved when the services of well trained persons in these fields are available.

If I had to summarize all the responsibilities of a medical school to the community my suggestions would be classified from the standpoint of university administration of medical colleges in general, basic science division in general and specifically, and the full time clinical faculty. In other words, a medical school, besides graduating a few physicians each year, must stimulate an improved quality of medical care and assume leadership in all activities relating to better health of the people, even of people in the state who may never have seen the medical school or any of its professors. This influence of the medical school extends beyond the school and the state. Indeed, through research discoveries, the benefits of the school reach the entire country and the world. These multiple goods cannot be measured in monetary terms, although money is required in large amounts. This is a challenge to capture the imagination of every one desiring man's greater happiness.

I would like to conclude this talk by stating that I have made a conclusive and reasonable effort to cover the opinion of the people of this state. First, I went to my medical profession. I visited every county medical society, and in every instance but one I propounded to these societies the question of a medical school. They listened to me with a great deal of interest. They paid me the courtesy of asking many questions. I would like to state this observation, however, that the interest in organized medicine was more

noticeable in the smaller medical societies than in the large. Very often in meetings of eight or ten physicians in the smaller medical societies we discussed matters pertaining to medicine far into the night, oftentimes past midnight.

One of the outstanding questions for debate at these meetings was the feasibility of a medical school for West Virginia. Of course, many of their reasons were sentimental, but many of them were based on scientific ideas. Without question, we need an outlet for the large number of students in West Virginia who want to study medicine, but who are told in no uncertain terms that this state cannot in any sense guarantee them a place in a medical school. There is no other department of education in our state in which a student is denied the privilege of pursuing the type of education he desires.

In the past, our ideal attainments have been in the placing of small schools throughout the state, due primarily to the fact that transportation, costs, and sometimes geographical and political considerations have entered into the adoption of such a program of education. The undergraduate department of the West Virginia schools is certainly nothing to which we can point with pride. In fact, we are really ashamed of our graduate instruction.

There were reasons for the early development of our education in West Virginia. In the days when Wheeling was the capital many of our people migrated from the north carrying with them the ideals of Yale and New York, and those who migrated from the south carried the ideals of Virginia and the South. Even today one can observe that this partiality still exists in our educational system.

I think that we, as doctors, in suggesting that West Virginia give serious consideration to the establishment of a four year school of medicine will exert a great deal of influence in having adopted a unified idea of education in West Virginia. I am very happy to say that I do believe that almost every member of the West Virginia State Medical Association approves the establishment of a four year school of medicine, at the same time realizing that it will be the most expensive single department of education ever set up in this state. In all my talks before county medical societies, I have endeavored to make no estimate of the cost of a medical school; however, I would be in favor of encouraging our legislators, or any committee that might be appointed to look further into the affair to point our objective toward the best medical school in the country. We have every reason to believe that many schools of research would surround us if we establish in West Virginia a modern four year school of medicine, complete in every detail.

I shall not discuss location or faculty. We can avail ourselves of the services of the Association of American Medical Colleges, and the Committee on Medical Education of the American Medical Association, who through this half-century of experience in rearranging our medical school system, will assist us in making surveys and offering suggestions, upon which we may depend in the mature consideration we may give to this important problem.

WHAT TO SAY TO THE MORIBUND

An old friend, who asks me to dinner when I am well and promptly puts me into one of his hospital beds when I fall ill, is shortly to retire, having reached the age limit for a professor of medicine. He has to deliver a valedictory address to his students, and his subject is to be: "What to Say to the Moribund."

Some doctors, he says, have a rule-of-thumb solution for this most delicate of problems: not a word, not a gesture to indicate the approach of death. Such doctors will have nothing to do with the mysteries beyond the veil. The professor himself has as many solutions as he has moribund patients, with this one rule applied to all—to do as he would be done by. One of his patients was an old cancerphobe doctor with a tumour in the lower abdomen. "Is it that, Professor?" he asked. "Yes, I am afraid it is," came the answer, and the word cancer was never mentioned. It is curious, the professor notes, how seldom hospital patients themselves broach the subject of impending death. Is it that the relation of hospital doctor to hospital patient is seldom tete-a-tete and leisurely.

Looking back, I can remember only one occasion, 40 years ago, when I blurted out a death sentence. It was murder with a bludgeon. The patient was a middle-aged chemist recently admitted to a private sanatorium whose one and only doctor was about to take a holiday. The doctor said to me as I took over: "So-and-so is a 'gonner.' It is your duty to tell him so." There was still plenty of fight in him when I began. When I had finished a minute later he was down and out. A knockout blow in the ring could hardly have been more instantaneously effective.

Once I was the recipient instead of the donor of a death sentence. The exceedingly able doctor in charge of me felt obliged to tell me my days were numbered. He did so with infinite tact and well-graduated circumlocution. I smiled to myself, for the point to which he guided me so skillfully was one I had reached long before on my own account. Now he is dead and I am alive and kicking. All of which suggests that silence is golden.—The Lancet.

THREE LINES OF DEFENSE

There are three lines of defense against cancer. First, the patient; second, the practicing physician; and, third, the specialist. Like the corners of a triangle or the legs of a tripod, each one is as important as the other two; without one the others are useless, incomplete, ineffective.—A. E. Cardle, M. D., in Minnesota Medicine.

CARDIAC CHANGES IN ARTERIOVENOUS FISTULA

(CASE REPORT)

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This case report is presented because it illustrates the rapid return of the heart to normal size following quadruple ligation and excision of a large arteriovenous fistula.

The effects of arteriovenous fistula on the circulation in general, and on the heart in particular, have been stressed by many writers. However, there have been few reports which note the early cardiac changes that occur following excision of the fistula. Pendergrass[1] felt that there was an immediate increase in heart size following excision of the fistula, with a decrease beginning in twenty-four hours and usually well established by the seventh postoperative day. Elkin[2] believed the early increase in heart size following surgery was due to technical errors, particularly in the interpretation of x-rays made with a portable machine.

Elkin[3] explains the pathological physiology of arteriovenous fistula upon the circulation as follows:

"Establishment of a fistula (between artery and vein) introduces a secondary circuit into the vascular system. The peripheral resistance in the circuit is lowered, the capillary barrier being eliminated, and arterial blood is short-circuited directly from artery to vein. In a fistula of a large vessel, like the femoral, one-fifth to one-half of the blood ejected by the left ventricle is shunted to the right side. In most instances the blood pressure changes are not extreme, the systolic pressure soon returns to normal, but the diastolic pressure, as a reflection of the general lowering of the peripheral resistance, remains lowered. The heart accommodates to the increased venous return by acceleration of rate and increased strength of contraction, effecting an increase in cardiac output. Soon an increased circulating blood volume is added as another compensatory mechanism."

McGuire[4] and his associates, in reviewing the clinical and experimental observations on effects of this condition, were able to demonstrate the following changes associated with the development of a large arteriovenous fistula:

a. Fall in the mean arterial blood pressure and acceleration of the pulse.

b. Increase in cardiac output and stroke volume.

c. Elevation of the venous pressure distal to the fistula, but little change in the venous pressure proximal to the fistula.

d. Acceleration of the velocity of the blood flow proximal to the fistula and retardation of the blood flow distal to the fistula.

Certain factors contribute to variation in heart size following surgical eradication of the fistula. The size and duration of the fistula probably are of most importance. Proximity of the fistula to the heart, age of the patient and the condition of the heart and blood vessels are significant factors. One could hardly expect an old sclerotic heart to respond as rapidly as a heart in the second or third decade of life.

CASE REPORT

Three and one-half years prior to admission to the Charleston General Hospital, the patient, a 15 year old white boy, was accidentally stabbed in the right thigh, just below the inguinal ligament. His right lower leg became gangrenous one week after the accident, and was amputated six inches below the knee. Soon after the injury the patient noticed a small lump at the site of the stab wound. The lump slowly increased in size and seemed "to sing" to the patient. The patient's past health had been excellent. He had had the usual childhood disases. There had been no other serious illnesses or operations except a tonsillectomy one month prior to admission.

Physical examination revealed a well developed, well nourished white boy. Chest examination revealed the heart enlarged downward and to the left. The rate was 102. There were no murmurs. The blood pressure was 96 systolic and 60 diastolic. There was a drop in the pulse rate from 100 to 48 on compression of the fistula, with a rise in the blood pressure from 96 systolic and 60 diastolic to 106 systolic and 72 diastolic. The abdomen was soft, flat and nontender. There were no masses or scars. Examination of the extremities showed the right leg to have been amputated six inches below the knee. The stump was in good condition. There was a lemon-size, pulsating mass on the anteromedial side of the upper part of the right thigh, over which a thrill and bruit could be elicited. The mass was compressible. The thrill and bruit were continuous throughout the cardiac cycle.

X-ray of the chest showed an increase in the bronchial vascular margins throughout each lung with generalized enlargement of the cardiac silhouette (figure 1).

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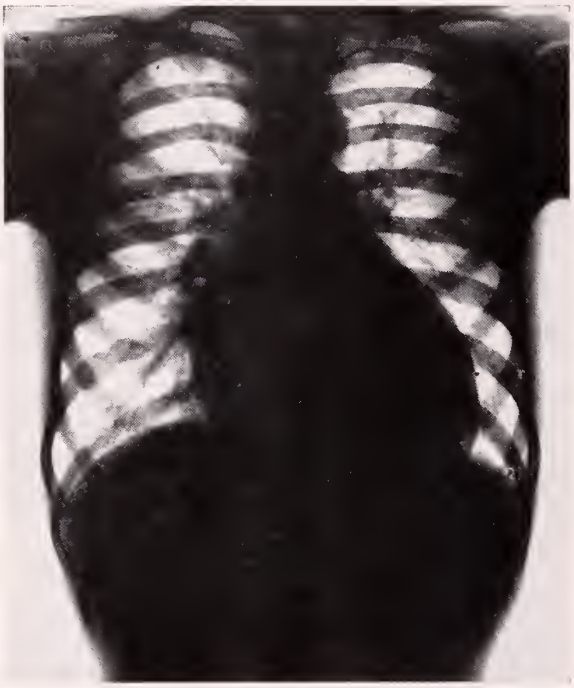

FIG. 1
Preoperative

Operation.—Under combined spinal and pentothal anesthesia, a longitudinal incision was made over the upper part of the mass. Many dilated blood vessels were encountered in the subcutaneous tissue. The incision was carried down to the proximal femoral artery and vein, and the femoral artery was found to be three times normal size, the vein about five times normal size. Ligatures of braided silk were passed around the artery and vein, separately, but were not tightened. The communication between the artery and vein was found 4 cm. distal to the profunda branch. The ligature on the artery was placed proximal to the profunda branch. The incision was continued longitudinally over the mass, and ligatures of braided silk were passed around the artery and vein distal to the mass. The ligatures were then tightened, both proximal and distal to the mass.

The pulse rate was 140 immediately before the ligation and slowed to 66 immediately after. Shortly after the ligation, it rose to 120. The fistulous sac measured 7 by 5 cm.

The mass was then slowly dissected out by sharp and blunt dissection, during which many communicating branches were found and ligated.

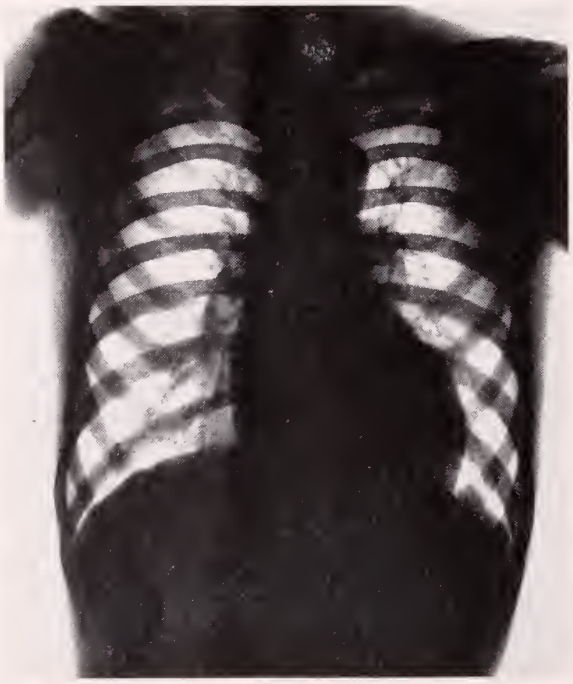

FIG. 2
6th Postoperative Day

FIG. 3
12th Postoperative Day

The leg, distal to the ligation, was warm and of good color. The patient was discharged from the hospital on the seventh postoperative day in good condition. X-rays of the chest (6 ft. plate) on the sixth postoperative day showed a marked decrease in heart size (figure 2). Further x-ray studies on the twelfth postoperative day showed the cardiac silhouette to be normal in size (figure 3).

SUMMARY AND CONCLUSIONS

1. A case of arteriovenous fistula in a 15 year old white boy is presented because it illustrates the rapid return of the heart to normal size following quadruple ligation and excision of an arteriovenous fistula involving the femoral vessels.

2. The cardiac changes in this case were reversible by surgical elimination of the fistula, the heart returning to normal size in twelve days.

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GERIATRICS AND PUBLIC HEALTH

The clinical treatment of the aged embraces almost every mystery that still baffles medical science. The leading causes of death in the United States last year—diseases of the heart, cancer and other malignant tumors, intracranial lesions of vascular origin, and nephritis—each is a problem of geriatrics. Such diseases are crippling millions of mature persons who are now doomed to linger for years this side of death and that side of life. Geriatricians bring them hope. As this work develops, more and more aging persons will find renewed vigor and opportunity to engage in productive work.

The problem of caring for the aged is not only a medical one. Increased life expectancy, low birth rate, reduced immigration, and modern medical care are among the many factors that have changed the population structure of our country. We are no longer a young nation. As a result, our present 20 to 60 year-old working group is finding it more and more difficult to support all age groups. The presence of a large, unproductive, and unhealthy segment of manpower creates a financial burden that endangers the national economy. Industry and government must join with medicine in solving this problem.—J. R. McGibony, M. D., in Geriatrics.

INFLUENZA VACCINES

It seems apparent that the ambition to develop vaccine to prevent influenza has not been achieved. Moreover, the variability of the strains seems to be the obstacle which must be overcome just as it is in other virus-borne diseases.

The same questions concerning the viruses suspected of causing influenza as those which are equally pertinent to the viruses of poliomyelitis must first be answered before satisfactory progress can be hoped for. —International Medical Digest.

SOME PRACTICAL ASPECTS OF SURGICAL CARE

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Recent advances in surgery are predominately those steps of progress made in preoperative and postoperative care. The newer concepts of chemotherapy, plasma and blood transfusions, nutrition, early ambulation, and prevention of pulmonary embolism call for a re-evaluation of responsibilities. The best care of the surgical patient has always depended upon close teamwork between the surgeon, the referring physician, the anesthesiologist, the house officer, and the nurse. A great deal has been written about the scientific application of the newer aspects of surgical care, but little has been said about the division of specific tasks among the members of the team. The careful performance of the details of preoperative and postoperative care carried out by each participant of a well integrated organization lessens mortality, decreases morbidity, and makes the difference between good and only average surgical management.

PREOPERATIVE CARE

The patient's care begins with the family physician. His responsibilities should be definite and clearly outlined.

(1) Psychologic Preparation—A worried patient who lacks confidence in the judgment of his physician or surgeon is a poor surgical risk. No surgeon desires to perform the simplest elective procedure if the patient has a fear of not surviving. A complete and thorough discussion of the impending operation allows the family physician to discover and correct as far as possible those factors which cause apprehension.

(2) Diet—As soon as it is decided that the patient is to undergo elective surgery, he should be placed on a high protein, high caloric, and high vitamin diet. Overweight patients should be given a reducing diet. Quite frequently one must wait for some time before a hospital bed is available and this period can be utilized to improve the nutrition of the operative candidate.

A good preoperative diet provides for optimum daily needs, corrects protein and vitamin deficiencies, and supplies a nutritional reserve without causing an excessive weight increase. It is important that adequate proteins and vitamin C be given to insure proper wound healing. The physician should familiarize himself with the

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protein values of many common foods in order that he can easily suggest a simple diet which will afford at least 100 grams of protein daily. It is imperative that cases of marked weight loss, chronic sepsis, malignancy and the gastro-intestinal tract, or severe biliary dysfunction be given a maximum protein intake. The following table shows a simple preoperative diet with emphasis on proteins and vitamins:

	Amount	Grams	Vitamins
Milk (Whole, skimmed, or buttermilk)	1 quart or more	32.0	riboflavin
Meat (Lean meat, fish, chicken, liver	2 servings	35.0	niacin
Eggs (If tolerated, prepared in any manner)	1 or more	6.0	A
Cheese (Cottage cheese if enjoyed)	1 serving	6.0	A
Two vegetables (One green or yellow)			C, A, B
Two fruits (One citrus or a tomato)			C
Whole grain or enriched cereals or bread	4 slices	12.0	thiamine
	Total protein	90.0	

It is very essential that specific instruction such as a typewritten list from the foregoing table be given to the patient.

(3) Respiratory Prophylaxis—A careful examination of the upper respiratory passages and lungs should be done in the office. Immediate treatment of bronchial and nasal irritations, along with attention to carious teeth, will greatly reduce the incidence of troublesome pulmonary complications. A clean mouth is also good insurance against postoperative parotitis. Individuals with chronic coughs and long-standing asthma are apt to be undesirable risks. Many minor bronchial infections may be improved with penicillin by nebulizer.

(4) Urinal and Bedpan Training—Many patients find it difficult or impossible to void or use the bedpan in the recumbent position. If the patient practices using the urinal and bedpan while lying down at home, he is less apt to experience difficulty after operation. As a result, fewer catheterizations and enemas are necessary. The use of morphine, which is so frequently and wrongly given for discomfort from a distended bladder, is eliminated and the incidence of cystitis is reduced. Oral mineral oil, 30 cc. daily, for two or three days prior to admission will usually clear the intestinal tract, and make disagreeable preoperative enemas unnecessary.

(5) Special Medications—The administration of certain specific drugs such as sulfasuxidine prior to intestinal surgery, should be supervised by the referring physician. A fixed date for hospital admission must be determined before such therapy is instituted. The physician should also recommend daily hot water douches when vaginal surgery is anticipated. The scarcity of hospital beds and the patient's finances may be eased by such preoperative preparation in the home. The condition of the diabetic patient should be evaluated and his carbohydrate-insulin balance regulated before elective surgery is considered.

(6) Drug and Physical Idiosyncrasies—Frequently individuals are allergic to certain foods, morphine, aspirin, novocaine, sulfonamides, adhesive plaster, or other common hospital medications. The family physician who is familiar with these sensitivities and physical idiosyncrasies should report them to the surgeon prior to the patient's entry into the hospital.

(7) Blood Donors—Blood transfusion is utilized today in many major surgical procedures. It is frequently difficult after the patient arrives in the hospital to contact the family and arrange for an adequate number of blood donors. An advance discussion also prevents any fear that one unacquainted with the common use of whole blood transfusions might experience. Too great emphasis cannot be put on the responsibility of the home physician to advise the family to be prepared to donate blood as soon as the patient is admitted.

(8) Prolonged Bed Rest—The patient who spends a great deal of time in bed prior to operation is predisposed to pulmonary embolism from phlebothrombosis of the deep veins in the legs. Early ambulation after operation will not offer sufficient protection if a prolonged period in bed at home has promoted venous stasis. Simple exercises which provide motion of the major joints will improve circulation and should be suggested if the bed rest at home is absolutely necessary. Patients become weaker in direct proportion to the duration of time that is spent in bed.

HOSPITAL CARE

As soon as the patient enters the hospital, he should be seen by the house officer who has been previously notified of preoperative plans by the surgeon. Immediate orders for diet, indicated laboratory work, and other therapeutic procedures should be written. This allows all hospital attendants to start intelligent care without delay.

The period of preoperative preparation in the hospital should begin with a thorough history and physical examination and careful evaluation of the patient. In small community hospitals in which internes are not available, the attending surgeon may make this examination and send a copy to be incorporated in the patient's chart. Some private hospitals supply their attending physicians with admission sheets. The front of the sheet gives the patient's name, provisional diagnosis, requisition for laboratory work and x-ray, and allows space in which orders may be written. On the back of the sheet is a blank physical examination form. If this completed blank is sent to the hospital with the patient or prior to his admission, the hospital personnel has instructions for immediate care. The sheet is placed on the chart and the physical examination by the attending physician becomes a part of the permanent record.

It is important to know the status of the renal function, cardiac efficiency, and the total blood picture. In cases of debility, dehydration, vomiting, or diarrhea, it is also imperative that the protein and chloride content of the circulating blood be determined. The dietary history and nutritional status of the patient, if possible, should have been carefully evaluated before admission. If the patient's status is unsatisfactory, he should be restored to a good state of nutrition and a positive nitrogen balance before operation. One hundred grams or more of protein are required daily to protect the liver from any toxic effects of anesthesia, to prevent tissue edema and to supply the elements necessary for repairing tissue.

The minimal normal daily requirement for an adult is one gram of protein per kilogram of body weight, or, roughly, half a gram per pound. It is essential that the caloric intake be maintained above basal levels if the protein intake is to be utilized in tissue metabolism. Otherwise, the proteins administered will be broken down by the body for their caloric value. The entire daily caloric intake should equal or exceed 30 calories for each gram of protein. A patient receiving 100 grams of protein should take additional nutrition to give him 30 times 100 or 3,000 calories per day. These additional food requirements are given preferably by the oral route, but if this is not possible intravenous hypertonic (10 or 15 per cent) glucose or high protein, high carbohydrate tube feedings may be used.

Parenteral vitamin C, 200 mg. daily, may be used routinely to insure against delayed wound repair. In debilitated and malnourished individuals, especially those with upper gastrointestinal lesions, it has been clearly shown that at least 1,000 mg. per day should be given parenterally to prevent deficiency.[1]

It is important at this time that the patient be taught the exercises of deep breathing and leg motions which he is expected to perform after operation.

A prothrombin determination should be obtained when poor liver function is suspected. Further investigations of the liver function, such as hippuric acid or cephalin flocculation tests, may be performed if the prothrombin level is decreased. Liver function is often improved by the administration of vitamin K, 20 mg. intramuscularly three times a day, and an increased protein and carbohydrate intake.

A careful urine examination and blood urea nitrogen determination will usually reveal any decrease in kidney function. Inability of the patient to concentrate the urine at least to 1.018 specific gravity or any other abnormality may be further investigated by the use of the phenolsulfonphthalien and concentration-dilution tests.

The vital capacity should be determined before surgery to serve as a base line for postoperative readings.

Anemia should be treated by the administration of iron and whole blood transfusions. A hemoglobin of 12 grams or more in a well hydrated patient is desirable before proceeding with elective surgery. During many major procedures, the blood loss may exceed 500 or 1,000 cc. Surgeons are prone to underestimate this deficit. It is wise for every surgeon to determine blood loss during various types of operations in order that he may be able more accurately to anticipate blood replacement. Two methods of determination are well described in the literature.[2] Both the gravimetric and colorimetric methods are easily performed by examination of the used sponges at the time of operation.

The wise surgeon never overlooks the opportunity to secure consultation with a well trained internist if medical abnormalities affect the risk. Likewise, the anesthesiologist should be given the opportunity for thorough consideration of the problem and be urged to see the patient and discuss the type of anesthesia that is best suited for the proposed procedure. A well prepared patient plus a competent anesthesiologist lowers morbidity and mortality.

When the hospital workup has been completed and the surgeon has planned a definite procedure,

a complete discussion of the entire case should be held with the patient and his family. A well informed house officer can accomplish a great deal if he will take time to answer questions and alleviate apprehensions which may be present on the night prior to operation. Inasmuch as the patient is usually taken to surgery early in the morning, the family should be urged to come to the hospital about the time of the expected termination of the operation. This obviates a tedious and prolonged period of apprehension which may be emotionally exhausting.

A good night's rest should be insured by the use of one of the barbiturate preparations at bedtime. These should not be given after 10 p.m. as an undesirable, cumulative effect may occur the following day.

The nursing personnel should be advised as to the expected condition of the patient after surgery so that it has in readiness oxygen, a catheter for sucking out mouth and throat, intravenous fluids, and constant suction apparatus as needed for prompt institution of appropriate therapy.

POSTOPERATIVE CARE

The injection of the lower intercostal nerves with local anesthetic agents decreases pain in upper abdominal incisions, and lowers the incidence of complications.[3,4] This simple procedure may be performed in the operating room at the completion of the operation. One per cent novocaine in saline has been suggested, but the duration of anesthesia is not sufficient. However, nupercaine, intracaine and eucupin are now available in an oil base, and offer a more prolonged effect. Often this type of block will relieve a great deal of the pain in an upper abdominal incision for the first thirty-six to forty-eight hours. Less narcosis is required, more efficient coughing and exercise can be performed, and less reduction of vital capacity is noted.

Too often, adhesive plaster is applied hastily in the operating room so tightly that it constricts respiratory movements and causes marked pain when distention occurs. Too much gauze is a frequent error. For many incisions such as those for appendectomy, herniorrhaphy, and saphenous vein ligation, a simple collodion dressing is sufficient. A small piece of thin gauze one or two layers thick is sealed over the wound with liquid collodion. A neat dressing, with the adhesive applied loosely over the entire gauze may be left in place until time for removal of sutures unless there should be a need for looking at the wound sooner.

The use of an ether bed is to be frowned upon. It is well recognized that the regulation of body temperature is often upset by anesthesia, and the patient returns to his room perspiring profusely. It seems absurd to increase this by piling on heavy blankets. An environment approximating normal body temperature by the use of one blanket over the patient is sufficient. The anesthesiologist who accompanies the patient back to the room should take the pulse and blood pressure before leaving him in charge of the nurse. Before he leaves the hospital, the surgeon should always be sure that the patient's condition is well stabilized. Too frequently, emergencies arise in this immediate postoperative period and the physician's help is not promptly available.

An immediate intake and output record of fluids should be started. It is imperative that each patient has an accurate intake and output chart for at least three days, or for the duration of any temperature elevation, vomiting, or fluid loss from any type of drainage. The daily totals of this chart should be kept on the graphic temperature sheet so that the surgeon can see them quickly as he makes his daily evaluation of the patient's condition. The maintenance of proper water and electrolyte balance is most important. To give every patient 3,000 cc. of glucose in saline each day without careful consideration of his requirements indicates poor attention. The total fluid loss must be accurately measured, and an equivalent amount added to the normal requirements. Uncomplicated cases usually lose 1,000 cc. to 1,500 cc. of fluids daily by vaporization and about 1,000 cc. through the urinary tract. If the output chart indicates a fluid output from suction, drainage, vomiting, and urinary excretion of 1,200 cc., the next day's fluid requirements should be calculated by adding to this output figure 1,000 to 1,500 cc. to cover the fluid lost by vaporization. In elderly patients with a poor cardiovascular system, it is important to be careful about over-administration of fluids. All patients cannot safely take 2,500 to 3,000 cc. of parenteral fluid a day. The determination of the daily fluid requirement should always be influenced by the clinical status of the patient.

Attention must not only be given to quantity but also to the kinds of fluids necessary. The sodium chloride intake should be from 3 to 10 grams a day unless there is an unusual loss of chlorides from vomiting, suction, or biliary and intestinal fistulas. Physiologic saline, 1,000 cc. daily, containing 8.5 Gm. of salt, will provide the necessary basal salt requirement. The remainder of the fluid intake should be glucose in distilled water or amino acid solutions as the nutritional requirement of the patient demands. Glucose

solution furnishes readily available carbohydrates for energy requirements, for glycogen formation, and for oxidation of ketones if they are present. When the need for carbohydrates is urgent, a 10 per cent solution of glucose may be given. It is recommended, however, that the rate of administration be not faster than 200 or 300 cc. per hour in order that optimum utilization may be secured. The coloric requirement of the postoperative patient is more nearly fulfilled by the use of the more concentrated solutions of glucose. Following extensive operations and in chronically ill patients, transfusions are frequently necessary. Daily blood counts and hematocrit determinations should be done until the levels have returned to approximately normal.

Postoperative pain may be controlled by the judicious use of narcotics. One of the great errors in postoperative care is the administration of too much morphine. Too often the nurse interprets routine orders to mean that each time the patient complains he is to be given morphine. A tight bandage, a full bladder, or insomnia frequently are the causes of unnecessary administration of a narcotic. As a result, there is marked respiratory depression and lethargy which predispose to pulmonary complications and venous stasis. It is important to remember that the very young, the elderly, and those patients in poor physical condition require less sedative and smaller doses of narcotics. Sodium luminal by injection subcutaneously will relieve nervousness and insomnia without depression. Its judicious use during the first two or three postoperative days will greatly diminish the amount of opiates required. Demerol has recently gained wide popularity because of its effective analgesic action without central respiratory depression or decrease in the cough reflex. Although it does not offer effective relief from severe pain as compared to morphine, pantopon, or dilaudid, doses of 100 mg. usually give adequate comfort. Its duration is short and a repeat dose may be required within two hours.

It is desirable to return the patient to a regular diet as soon as possible. During the first twenty-four hours there is decreased motility of the intestinal tract due to the anesthetic and, in abdominal procedures, to the operative trauma. During this early period, thin liquids should be administered as soon as nausea ceases. In serious cases, patients may have to be fed by carefully calculated intravenous fluids. Unless surgery has been performed on the gastro-intestinal tract, a palatable regular diet should be offered on the second postoperative day. The earlier the patient starts to take a normal diet, the less the tendency to air swallowing and uncomfortable "gas pains." Routine orders for surgical liquids and "diet as tolerated" indicate poor attention. The postoperative diet should vary with each case and be an important part of the daily evaluation of the patient's condition.

After the second day, the diet should offer 2,000 to 3,000 calories with 100 grams of protein.

Determination of the daily vital capacity will give valuable information as to the course of the patient's recovery. Vital capacity is decreased in almost every postoperative patient, but its return to normal should be progressive and rapid. Sharp changes may give an early clue to impending complications, especially those of a pulmonary nature. This procedure also encourages the patient to take deep breaths and better expand the lungs.

Since Leithauser's[5] recent popularization of early ambulation in 1941, most patients are allowed out of bed on the first postoperative day. This not only improves morale but also hastens convalescence. The incidence of pulmonary and vascular complications is probably decreased; the vital capacity increases more quickly, normal bowel and bladder function are encouraged, and general postoperative disability is markedly diminished. However, there are a few contraindications to early rising. These include shock, cardiac insufficiency, severe anemia and cachexia, an insecure wound, presence of thrombosis, or suppuration near the wound. On the evening following operation, the patient may be encouraged to sit on the side of the bed, kick his legs and cough. Motion of the feet and legs must be encouraged. The purpose of early ambulation is defeated if the lower extremities are allowed to hang motionless over the bed or chair. The upright position promotes venous stasis in quiet legs.

The following day, the patient is allowed out of bed. There are two common methods of assisting the patient to get up for the first time. The first allows the patient to turn on his operated side with the hips and knees flexed. This brings the knees to the edge of the bed. The nurse assists the patient in raising sideways to a sitting position as the lower legs fall over the side. In the second method, the patient grasps his popliteal fossa on the operated side with the hand on the same side. This allows him to splint the incision by drawing his knee toward his chest with the arm. The maneuver is completed by assisting the patient to a sitting position. After actively swinging the legs and moving his feet on the side of the bed, the patient stands erect and is encouraged to breathe deeply and to cough several

times. He should then take eight or ten steps and sit in a chair for ten minutes. Early walking and constant exercise of the legs are imperative supplements to early rising.

After the first time out of bed, the patient is urged to be up twice a day and to walk as much as his condition permits. Many nurses and interns have no routine method of assisting patients out of bed. Every physician should familiarize himself with the proper technique of early rising and teach his principles to those responsible for the care of his patients.

Some writers maintain that the incidence of venous thrombosis is one per cent of all surgical procedures, two per cent of all laparotomies, and three per cent of laparotomies performed in women. These complications are of great concern to the surgeon. There must be a concentrated effort to guard the patient against a possible fatal embolism. Exercises of the extremities, which are started immediately after recovery from the anesthesia, and early ambulation reduce venous stasis. Most cases of pulmonary embolism arise from the so-called silent phlebothrombosis. This more often develops between the fifth and twelfth postoperative day. Frequently, the first sign of phlebothrombosis is pulmonary embolism. The surgeon must watchfully examine the calves of the legs and the adductor canals for tenderness. The examination should also include an attempt to elicit Homan's sign (pain in the calf on acute dorsiflexion of the foot). Any obscure sustained increase in the pulse rate, slight elevation of temperature, or enlargement or tenderness of the calf muscles gives adequate warning of thrombosis. It is always wise to measure both legs immediately after operation and once or twice a day thereafter. These measurements should be taken at constant points above the ankle, at the calf, and midway between the knee and the groin. Measurements may be taken on all patients but it is imperative that elderly debilitated people, especially those with hip fractures, and carcinoma within the pelvis or abdomen, have this type of careful attention. Individuals particularly predisposed to thrombosis may be given heparin or dicumarol following operation as a prophylactic measure. The new preparation of heparin in the Pitkin's menstruum shows great promise for this purpose.[6]

At the time of discharge of the patient, the surgeon should send a complete and detailed summary of the case to the referring physician with suggestions for further care. This report should reach the local doctor as soon as the patient returns home in order that indicated therapy may be started immediately. Too frequently the surgeon gives the necessary prescriptions to the patient and tells him to report to his physician in one or two weeks. The patient then improves and feels it is unnecessary to obtain further medical care and he fails to consult his doctor with the result that occasionally some minor complication goes untreated. If the surgeon's suggestions are sent to the referring physician, who then starts therapy on the immediate return of the patient to his home, a more complete and satisfactory patient-physician-surgeon relationship is maintained.

CARE AFTER HOSPITALIZATION

The responsibilities of the family physician following major surgery are equally as detailed and important as those prior to hospitalization.

(1) Diet—In general, a high protein, high vitamin diet is advisable. After gastro-intestinal procedures, a soft or modified Sippy diet is always acceptable. The use of low residue foods following rectal surgery and special colostomy diets may be necessary. The return to an unrestricted diet should be gradual after surgery for peptic ulcer, cholecystitis, and gastric malignancies.

(2) Removal of Sutures—Early ambulation has allowed many patients to be discharged from the hospital with sutures intact. Sutures about the head and neck are usually taken out on the second or third day; in the scalp, the fifth to seventh day; in the abdomen, the sixth to eighth day; in the hands and feet about the tenth to twelfth day. In debilitated patients, sutures should remain for a fifty per cent longer period.

(3) Regulation of Physical Activities—The location of the incision and the presence or absence of systemic or local factors which may influence wound healing must be considered. At the time of discharge, the patient usually is walking about the hospital and taking moderate amounts of exercise. Following abdominal surgery, he should be allowed to go up and down steps at the end of the second postoperative week, but heavy lifting should be withheld for two months. A moderate amount of exercise should be encouraged. The patient may be instructed to take walks each day, gradually increasing in length. Except for hernia repair, the patient may be allowed to return to light work in three to six weeks; following uncomplicated hernias, a period of two months of controlled activity usually is required.

(4) Abdominal Supports—Debilitated patients with abdominal wounds are usually sent home

with a scultetus binder. This may be worn for a period of one to two weeks and then discarded. In general, special abdominal supports following uncomplicated surgery are entirely unnecessary. After operations on women, a soft two-way stretch girdle affords a great deal of comfort.

(5) Evaluation of End Results—The surgeon is always interested in a follow-up examination of the patient. Progress is made only by careful evaluation of the end results of treatment. Both the family physician and surgeon should maintain a record of their failures as well as of their good results. In cases of malignancy, the patient should be examined every six months for at least five years.

Superior surgical management requires careful, thoughtful attention to many details of care other than those occurring in the operation. Each professional attendant must perform his duties with the same thorough and meticulous watchfulness that is exercised by the surgeon at operation. Surgical standards may be greatly improved by closer association and cooperation of all those involved in the complete management of the surgical patient.

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IMPORTANT TO TEST FOR RH FACTOR

The most significant advance in obstetrical knowledge has to do with the maternal and infantile effects of heterology in father and mother with regard to the Rh factor. Because of this knowledge, it is now just as important to test for the Rh factor as it is to test for syphilis in early pregnancy. Rh negative women should not receive blood from Rh positive donors, nor should they mate with Rh positive men, and if they do they should avoid parenthood. The pediatrician should make special preparations to receive a child from such a mating. It is strongly likely to have congenital jaundice or massive edema, it may be stillborn or die shortly after birth, and the incidence of deformities is very high.—J. Decherd Guess, M. D., in J. South Carolina Med. Assn.

URINARY TRACT INFECTIONS*

By JAMES W. MERRICKS, M. D.,
Chicago, Ill.

The general practitioner usually is the first to see the patient with a urinary tract infection either because of symptoms produced by the infection or as a silent pyuria discovered during the course of a routine physical check-up. Not a few patients present themselves accompanied by a report from a laboratory indicating pus in the urine and suggesting further medical investigation. What should the attending physician do under the circumstances?

A careful history and physical examination should quickly indicate the severity and length of symptoms. Office study of the urine in the male must include the standard two glass voided specimen, wet drop preparation for density of pus cells and motility of bacteria, with the all important Gram stain performed upon the centrifuged urine. If available, a competent bacteriologic laboratory is of great help in separating and identifying the various strains of organisms, and is of especial aid in locating the stained tubercle bacilli. While a catheterized specimen is not routinely necessary in the male, a well boiled catheter with a gentle angle tip passed carefully under strict technique should not upset the patient. Needless to say, catheterization is a "must" in the female to obtain a direct bladder specimen. We are speaking of either the chronic or silent type of pyuria. Individual judgment regarding instrumentation is necessary when the patient is suffering from an acute urinary infection.

The major pitfall in the successful management of most urinary infections is the presence of one or more complications. An excellent urologist, a friend of mine, recently said he treated all urinary infections with sulfadiazine alone or combined with penicillin. That statement is probably true for the majority of urinary infections, for in general sulfadiazine is the choice in chemotherapeutic drugs and penicillin is the choice antibiotic. Another fact to remember is that many urinary tract infections do not become apparent clinically because the patient receives medication for other infections, thus forestalling urinary infection. Pediatricians in particular believe this to be true, for urinary infections in children seem to occur far less frequently today.

Having established the fact that the patient has a urinary tract infection and having determined in general the type of organism, which

*Presented before the regular monthly meeting of Kanawha Medical Society, at Charleston, September 16, 1947.

usually belongs to the coliform group, administration of a sulfonamide seems to be the most effective method now. Rarely more than 0.5 Gm. of sulfadiazine (which we prefer) four times a day is necessary. Sodium bicarbonate is optional at this dosage level. The drug may be given for a week or ten days at a time and repeated later if necessary. Combinations such as sulfadiazine and sulfacetimide, or sulfathiazole with sulfasuxidine, have been effective where one alone did not suffice. We have been impressed with the adjuvant action of sulfasuxidine with streptomycin, especially in the severe types of the colon group infection. Evidently the sulfasuxidine reduces the number and invasive power of organisms in the colon. This fact would suggest that at least some of these infections come from the colon by direct lymphatic extension. One fact should be kept in mind while treating a patient with any of the modern urinary antiseptics, namely, that he must be kept under constant observation for evidence of toxic reactions to the drug. At times drug sickness may be more disturbing than the original illness. This is true should a block develop in the renal pelvises or ureter, or toxic nephritis, or, in the case of penicillin, severe allergic reactions such as exfoliative dermatitis, develop.

For the coccal type of infection penicillin is the drug of choice. This usually requires hospitalization. However, we have been gratified at the response of a patient to ambulatory treatment in whom a persistent staphylococcus aureus cystitis developed with edema of the bladder neck resembling a tumor. Penicillin in oil and beeswax (Romansky formula) 300,000 units a day intramuscularly for one week sterilized the urine. Penicillin, 50,000 units every three hours, given orally, has been effective in less severe infections of a coccal nature. During penicillin treatment, coliform bacilli may appear in stained smears of urine sediment, but invariably disappear when the treatment is stopped.

Mandelic acid, the oldest of modern specific urinary drugs, is useful if good renal function is present. The urine must be maintained at an acid level with an acid diet or acidifying drugs. A popular form is mandelamine, mandelic acid and methenamine in combination, given so that the patient receives the equivalent of 8 Gm. of mandelic acid in twenty-four hours. Few patients are allergic to this drug, although it does cause gastric and intestinal irritation. One patient (a doctor) said mandelic acid was the most refreshing drug he had ever taken. A more recent patient was severely upset by the drug, which is the only specific for streptococcus fecalis infection. She also took one dose each of sulfadiazine, penicillin and sulfasuxidine, being severely disturbed by each, yet her urine became sterile and symptoms disappeared after a year of local irrigations elsewhere had proved ineffective.

The so-called non-specific or amicrobic pyurias seem to respond best to a course of three intravenous injections of neo-arsphenamine or mapharsen at five (5) day intervals.

Methenamine or urotropin is still a useful drug. It must be used with an acidifying agent such as sodium acid phosphate and may be combined with mandelic acid. Occasionally a patient returns with a subsiding infection after having voluntarily taken methenamine for a few days. Do not discard methenamine; it requires less control than other urinary antiseptics.

Mild, uncomplicated lower urinary infections may fail to respond to any of the above drugs, becoming more severe until the patient is extremely sick with pyelonephritis, which is difficult to explain except on the basis of ureteral reflux or ascent through the lymphatics. Lately we have observed a number of such patients with increasingly severe colon bacillus infections. In vitro testing of the organisms revealed sensitivity only to streptomycin in high concentration. If more than 2 Gm. of streptomycin are given each twenty-four hours, possibility of eighth nerve damage is increased. Vestibular disturbances appeared in 16 per cent of our patients during the past year, most often when more than 2 Gm. a day were used. Unless 2 to 4 Gm. of the drug a day are given, the organism in the urinary tract may develop resistant strains. The urine pH must be maintained at 7.5 to 8 for best results. Streptomycin is a drug for use chiefly in specific instances of a resistant or severe colon group of infections; Bacillus pyocyaneus (Pseudomonas aeruginosa), responds only moderately well to streptomycin; Aerobacter aerogenes usually responds well; Proteus ammoniae, which splits urea, alkalinizes and precipitates phosphates as encrusted cystitis often in the absence of obstruction, is easily killed off. Encouraging results in uncomplicated Proteus infections are occurring with a new sulfa compound 3-4 dimethyl-5-sulfanilamido-isoxazole (NU445), which is therapeutically effective in a pH range of 6.0 to 8.0. The combination of sulfasuxidine, 8 to 10 Gm. daily, and streptomycin may be effective when streptomycin alone fails in colon bacillus infections; a blood level of 2 to 3 mg. per hundred cubic centimeters of sulfasuxidine is obtained with effective urinary excretion of the drug.

The sulfasuxidine may reduce the number of colon bacilli passing through the lymphatics from bowel to urinary tract.

Streptomycin in the treatment of renal tuberculosis has not been used sufficiently long to evaluate its worth, which may lie in preventing renal involvement or controlling very early lesions of the renal papilla in patients receiving the drug for active pulmonary disease. It is difficult to visualize how healing in the tuberculous kidney could occur with streptomycin once cavitation and necrosis supervene. Cavitation may be far advanced before discovery, as we found in a robust, hardy appearing interne. Pyuria was found during a life insurance examination. Urine cultures were sterile, but tubercle bacilli were found after careful search. The source of the pyuria was a so-called silent tuberculoma of the kidney, a rare finding, revealed by nephrectomy. The patient is well and active three years later, with no other evident focus. Drugs cannot supplant surgery in the presence of enclosed or retained pus.

When an apparently simple infection fails to respond to treatment the practitioner himself can carry out more detailed investigation for complications. Blood nitrogen estimations should be made before considering instrumentation or excretion (intravenous) urography, which is demanded before other measures are planned. An upright film late in the series should be taken if renal retention is suspected. This film is a "must" in the female because of the frequency of renal ptosis. In obscure instances of bladder neck obstruction in both sexes of any age, the retrograde cystogram is easy to take, requiring only sterile precautions in passing a simple catheter with injection of 150 to 200 cc. of sterile 15 per cent sodium bromide or skiodan solution. A full size K. U. B. film is used to reveal any reflux to the kidneys. The dye then is allowed to trickle out without suprapubic pressure, after which a second exposure is made. This will reveal retention of dye in a diverticulum, a possible source of chronic pyuria.

A case has been noted of a 23 year old female requiring 1,000 cc. of dye, so extensive was the bilateral dilatation of the upper urinary tract secondary to a long standing bladder neck obstruction. Chronic pyuria with blood nitrogen retention was the chief feature in this instance. We have seen a number of similar young female patients, improvement being obtained following endoscopic bladder neck resections.

Thus it is evident that much can be done in the early investigation and treatment of urinary infections before the urologist is sought to carry out more complicated procedures. Most persistent infections are caused by obstructions such as stone, bladder neck disturbances including neurogenic bladder, operations in the pelvis such as bowel resections, anomalies, tumor, and hydronephrosis. Infection formerly ruined many good operations for hydronephrosis but appropriate antibacterial therapy recently has been the key to successful plastic surgery on the hydronephrotic kidney, especially in the geriatric patient. We have followed a 76 year old female patient for several years after having done a successful Foley Y plastic for chronically infected right hydronephrosis producing pyuria, fever, chills and pain in the right flank.

The role of chronic unilateral pyelonephritis in the production of hypertension is receiving greater attention recently. The hypertension patient is being more thoroughly studied by the internist today. Where indicated, thorough urologic study is revealing a steady, though small, percentage of persons with hypertension who may be helped by nephrectomy. It is not yet possible to predict accurately which patient will be benefited. Evidence is growing that if the patient is not over 40 years of age, the hypertension not of more than three years' duration, then an infected, poorly developed hypoplastic but functioning kidney seems most likely to be playing an etiologic role in the urologic features of the syndrome. Several instances fitting into the above definition have been seen. Further study is certainly needed to clarify the urologic features of this disease.

In general, the treatment of most uncomplicated urinary tract infections can be carried out by the practitioner. He has at his disposal an imposing array of modern, specific therapeutic agents. He has also some simple mechanisms to aid him in finding out why, at times, his treatment is unsuccessful.

THE LEFT DOMINANT CHILD

Some confusion is suffered by many persons who are left-handed or left-eyed, but their difficulties are increased if their left-handedness is changed by training to right-handedness. Even the presence of right-eyedness does not mean that learning efficiency will be increased by changing to the right hand. Confusion is further increased when the eye-hand dominance is crossed.

Approximately 80 per cent of stable children show preference for right hand, right eye, and right foot. Six per cent show preference for left hand, left eye, and left foot. Sixteen per cent have crossed preference. It has been fairly well proven that more children who are emotionally unstable tend to have undetermined preference for eye, hand, and foot than the emotionally stable.—Emmett T. Byron, M. D., in Texas St. J. of Med.

The President's Page

Some years ago there was translated from the Polish into English a remarkable novel of the beginning of the Christian era, bearing a Latin title, "Quo Vadis." It dealt with a very unpleasant person called Nero. The title, "Quo Vadis," which means "whither wandering?" or "where are you going?", has always intrigued me, and as I find myself thinking of the results of the recent convention of the West Virginia State Medical Association, where we had in attendance one-third of our membership, I feel that one can rightfully and thoughtfully ask himself, "Where are we going from here?"

The tempo of the world and medicine has quickened; methods, laws, traditions and beliefs related to medicine are ever changing. Certainly the medical profession today is on trial for constructive changes. We must constantly face the question "quo vadis" . . . "wither wandering," in order to keep adjusted to the changing medical picture. It is absolutely necessary that we work in harmony with community education, and this applies more particularly to the physician than to any other class of educators.

One might say the national picture is not a pretty one. People are living to an older age, but there is not enough distribution of physicians in the communities to take care of the increase in population and the increased demands upon the physician. The large cities are jammed and the rural areas in want.

Certainly the school of medicine which we strongly advocate in West Virginia can be classified as coming under a big national program. For the past twenty-five years our legislative proposals have been adverse to the ideals of the medical man. The Wagner-Murray-Dingell Bill would establish on a national scale the same type of governmental compulsion with which the people of Great Britain are now faced. Such legislation is a warning sign which we cannot ignore. It does place us at the crossroads. If we are not to be bound up under the domination of political machinery we must make changes. I am firmly convinced that the medical profession of West Virginia must not build in terms of the past, but in terms of the future. It is my conviction that before we may start construction work we should implant in our social structure a firm base on which we may erect our proposed medical edifice. That base is necessarily a four-year school of medicine.

To sum up the reaction of our annual meeting—and certainly the theme was a four-year school of medicine—we are faced not only with the strong conviction that we must have a medical school, but it is evident if we are to have the things we want, other educational assistance in this state must not suffer. To this end the President of the University joins you and me in saying that if all the requirements of education are met in the state, certainly medicine will be given proper consideration by any legislative or educational body. Looking at the school of medicine from this point of view, I should like to ask every physician in West Virginia to give thought and study to our cause.

Thomas Bee

President.

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THE NEW PRESIDENT

Dr. Thomas G. Reed, of Charleston, president elect of the West Virginia State Medical Association, has served for many years in various capacities in organized medicine. He has been active in the affairs of Kanawha Medical Society, of which he has been a member since 1929. His service during the past four years as a member of the Council will mean much to him in conducting the affairs of his office. This training has given him the opportunity to become well acquainted with the problems of organized medicine in this state.

Doctor Reed has served with distinction as chairman and member of key committees of the State Medical Association. He served as vice president in 1944. Just recently, he was chairman of a Council committee appointed to provide for the insurance commissioner a definition for "hospital care" and "medical care." For several years he served as a member of the DPA advisory committee.

Doctor Reed was born in Hardy county, near Moorefield. He received his M.D. degree from Jefferson Medical College, Philadelphia, in 1926. He is a diplomate of the American Board of Urology, a member of the American Urological Association, and a Fellow of the American College of Surgeons.

We congratulate him upon his election to this high office, the highest within the gift of his profession in West Virginia. Knowing him as we do, we predict that he will in every way prove to be a worthy successor to Doctor Thomas Bess when to takes office next January.

1949 PROGRAM COMMITTEE

Dr. Paul H. Revercomb, of Charleston, will head the Scientific Work Committee, which will arrange the program for the 82nd annual meeting of the West Virginia State Medical Association in 1949. The appointment was made by the president elect, Dr. Thomas G. Reed, who at the same time named Dr. J. F. Barker, of Huntington, and Dr. Carl E. Johnson, of Morgantown, as the other two members of the committee.

The members of this important committee are all qualified by training and experience for the work that must be done in building a scientific program for the next annual meeting.

Doctor Revercomb is president of Kanawha Medical Society; Doctor Barker has served as president of the Cabell County Medical Society; and Doctor Johnson, who recently completed four years' service on the Council, has served a term as secretary of the Monongalia County Society. All know the value of a good program and all have had experience in providing for the local societies speakers whose papers have been interesting, timely, and instructive.

We know that the program that will be arranged for the meeting next year will be one that will hold appeal for all of the more than fourteen hundred members of the State Medical Association.

THANKS, HUNTINGTON

The annual meeting at Huntington, which drew next to the largest doctor attendance in recent years, was an outstanding success notwithstanding the trouble that was experienced in providing hotel rooms for all who wished to attend.

Dr. James R. Brown and the members of his Housing Committee did a fine job obtaining accommodations for members and guests, and the managers of the Huntington hotels went all out in their efforts to provide rooms for everybody. While many visiting doctors had to accept rooms in private homes, they did so without complaint when it was understood that the

hotels had been booked to capacity for many weeks prior to the convention.

The Local Arrangements Committee, headed by Dr. E. J. Humphrey, cooperated splendidly in all matters pertaining to local entertainment, arrangements, and the many other details that have to be given attention before and during a meeting of this kind. Mrs. E. J. Humphrey, auxiliary convention chairman, and the hard working members of her committee, rendered invaluable aid in connection with the pre-convention open house on May 9, and the banquet which brought the meeting to a close on May 12.

In general, the Huntington doctors and their wives deserve and have the thanks of all of the members of the State Medical Association for helping to make the convention a success.

WHAT IS A NORMAL BLOOD PRESSURE?

Numerous references concerning normal blood pressure values may be found in the literature and additional data are constantly being published. It is not the purpose of this editorial to review the extensive literature in this field. However, it is of interest to call attention to a recent paper by Boynton and Todd.* These workers reported blood pressure determinations on 75,258 students at the University of Minnesota—truly a formidable number. There were 43,800 men and 31,458 women in the various age groups studied, most of whom were under 26 years of age.

The mean systolic blood pressure for men and woman of all ages was 122 and 111 mm. Hg, respectively; the mean diastolic pressure for men was 74.5 and for women 69.7 mm. Hg. Systolic pressures below 109 mm. Hg were found in a greater percentage of women than men; systolic pressures above 120 mm. Hg (except in the age group 41 and over) occurred more frequently in men. It was found further that approximately two-thirds of the men had systolic pressures between 110 and 129 mm of Hg, whereas about two-thirds of the women had systolic pressures between 100 and 119 mm. of Hg. The mean systolic blood pressure shows an upward trend with age in women; this is not seen in men. The figures given probably represent only the first reading, so are somewhat higher than would be found if an average of several readings had been used.

In every age group, save that over 40, the mean systolic pressure in men exceeded significantly that in women. Other workers have reported similar differences in the blood pressure in the two sexes, although a few authors, and these are in the minority, feel that there is no significant difference.

Although this editorial deals with normal blood pressure values, the question of hypotension and hypertension calls for a passing comment. In view of the data presented by Boynton and Todd, it would seem illogical to speak of persons, especially women, as having hypotension if their systolic blood pressure reading was 110, 105 or even 100 mm. of Hg. Some physicians probably would consider these people as hypotensives and prescribe various agents in a pointless effort to elevate a normal blood pressure. It is indeed important to remember that it has been known for a long time that a relatively low blood pressure is quite compatible with a long life. As to hypertension—most physicians hold that the normal upper limits are approximately 140 mm. of Hg for systolic and 90 mm. of Hg for the diastolic pressure.

*Boynton, R. E., and R. L. Todd, Arch. Int. Med., 80: 454 (Oct.) 1947.

EXHIBITS

The response of the members of the State Medical Association to the appeal made to them to visit the scientific and technical exhibits arranged in connection with the annual meeting at Huntington was most gratifying. Many more doctors registered with our technical exhibitors than was the case in 1947. The exhibitors were, for the most part, pleased with the attendance, which, of course, was not as large as it would have been had it been possible to have exhibits and general sessions under the same roof.

Although the Scientific Exhibit was necessarily small, it probably attracted more doctors than ever before visited a similar exhibit at an annual meeting. The use of the small room just off the mezzanine at the Hotel Prichard was no doubt a contributing factor to the good attendance, but it was generally agreed that the exhibits were more interesting than usual.

Congratulations and thanks are due Dr. Hu C. Myers, Dr. Chauncey B. Wright, Dr. Melford L. Hobbs, and Mrs. Hu C. Myers for the very fine display arranged for the 1948 meeting.

A GOOD PROGRAM

Many doctors who attended the annual meeting at Huntington have stated that the scientific program was one of the best presented at a meeting in recent years. If attendance at general sessions is a criterion, then this must be true, for the doctor attendance at morning and

afternoon sessions was the largest ever recorded at an annual meeting. Much credit is due the members of the Scientific Work Committee, Drs. Russell B. Bailey, of Wheeling, Walter W. Point, of Charleston, and George T. Evans, of Clarksburg, for the varied program arranged for the three-day meeting.

Over-time periods were necessary in a few instances to enable speakers to answer all the questions propounded. With these few exceptions, the schedules were maintained, with session chairmen doing a fine job from the opening to the close of the scientific periods each day.

COMMUNITY HEALTH COUNCILS

There is a definite need for more community health councils in West Virginia. Most communities in the state have a number of agencies and organizations, both official and voluntary, engaged in certain aspects of health and welfare promotion. Sometimes mutual understanding of objectives and programs is lacking. Sometimes important phases of the total community health program are neglected while others might be over-emphasized.

The community health council is a mechanism for cooperative community effort. Duplication and wasted effort can be eliminated by such an organization, and it gives impetus to the work of all agencies and organizations promoting community programs.

A health council is not an exclusive organization, but a comprehensive one, including in its membership representatives from all agencies, organizations and civic groups interested in the health and welfare of the community. In health councils already existing, the county medical society has usually been a sparkplug.

A community health program must be based upon the needs of the community, and the health council is valuable in assisting to determine these needs. Such a survey by the citizens of the community is necessary before a total program of action can be effectively executed.

The question is often asked, "Who takes the initative in organizing a health council?" It need not be any one person in the community; it might be the county medical society, a practicing physician, a school official, an executive of a voluntary organization or any interested community leader. However, planning and coordination do not just happen. There must be effective guidance by one familiar with community organization. In many cases this has been a health officer or health educator.

Definite procedures cannot be outlined as a blueprint for the organization of community councils in all West Virginia cities or counties. The size of the community, the difference in problems and needs, the nature of the civic patterns, and the attitudes and interests of the people will determine the type of organization best suited for cooperative action on the local level.

State health councils, in an increasing number of states, are proving effective in coordinating the efforts of existing local councils and in the promotion of a sufficient number of these organizations to meet existing needs.

"HE TOOK TO HIS BED"

Those who received their medical training in a previous decade and have not since engaged in the practice of modern surgery may find themselves a little aghast at encountering postoperative patients walking about their rooms still reeking of ether. It is, however, in the tradition of today. We know that it is all for the best and that by these modern methods thromboses are prevented and embolic disturbances avoided. We have been made aware of the fact that despite their sojourn in a world of violence, most people still die in bed.

Those who indulge in a more placid form of medical practice than surgery have also become aware of the risks entailed in permitting patients to take too solidly to their beds. Levine called attention to a few of them as long ago as September, 1944, when he showed that with bed rest a shift of edema may occur from the dependent parts of the anatomy to the patient's back; that recumbency increases the total blood volume, and adds the risk of hypostatic pneumonia; that in old men urinary retention may develop after recumbency has been instituted. In other words, there are dangers attendant upon bed rest besides that of pulmonary embolism.

Too often the colloquial expression "he took to his bed" implies a grim finality—a failure to rise again from the horizontal position.—New England J. of Med.

DOCTOR SHORTAGE AND MEDICAL CARE

Is there a shortage of physicians? Is national medical care inadequate? Certain rural areas of the nation are almost entirely served by osteopaths and chiropractors acting as country doctors. Mental hospitals and public health agencies are critically understaffed in most states. The Army, the Navy, and the Veterans Administration are searching for physicians. The eyes of the public turn to the profession for its answer to these questions.

The organized profession has been willing to accept the responsibility for maintaining its own professional and educational standards. It has done the job well. It must also be willing to help establish the social norms of adequate medical care. If the organized profession will fully accept this challenge and handle it not emotionally and egocentrically but objectively and scientifically, a sound evaluation of medical needs and the methods for fulfilling them will result.—John S. Hirschboeck, M. D., in Wisconsin Med. J.

General News

DR. THOMAS G. REED, OF CHARLESTON, NAMED PRESIDENT AT ANNUAL MEETING

Dr. Thomas G. Reed, of Charleston, was elected president of the West Virginia State Medical Association at the second session of the House of Delegates, held at the Hotel Prichard, at Huntington, May 11. He succeeds Dr. Thomas Bess, of Keyser, and will take office January 1, 1949.

Dr. Fred Richmond, secretary of the Raleigh County Medical Society, was named first vice president, and

Thos. G. Reed, M. D.

Dr. J. C. Huffman, of Buckhannon, second vice president.

Dr. T. Maxfield Barber, of Charleston, was reelected treasurer for his 22nd consecutive term.

Dr. Walter E. Vest, of Huntington, was reelected AMA delegate, and Dr. W. P. Black, of Charleston, AMA alternate. They will serve for the two-year term ending December 31, 1950.

New Councillors

Dr. L. Rush Lambert was elected member of the Council from the first district, to succeed Dr. John P. Helmick; in the second district, Dr. M. H. Porterfield was reelected for his second term; Dr. George F. Evans, of Clarksburg, was named to succeed Dr. J. E. Wilson, of that city, in the third district; Dr. A. R. Sidell, of Williamstown, was reelected for his second consecutive term from the fourth district; in the fifth district, Dr. E. L. Gage, of Bluefield, was named to succeed Dr. J. L. Patterson, of Logan; and in the sixth, Dr. Russel Kessel, of Charleston, was elected to succeed Dr. Thomas G. Reed of that city. All of the new councillors will take office January 1, 1949, and will serve for a term of two years.

Maternal and Child Welfare

Each member of the present committee on Child Welfare was reelected for another term, and the following were elected as members of the committee on Maternal Welfare: M. B. Williams, Wheeling; J. H. Kilmer, Martinsburg; J. E. Page, Clarksburg; E. J. Humphrey, Huntington; E. W. McCauley, Bluefield; and W. E. Hoffman, Charleston.

The president elect will name the chairman of the committees on Child Welfare and Maternal Welfare, who, with the members, will serve throughout the calendar year 1949.

Resolutions Adopted

Seven resolutions, which were offered at the first session on May 10, were unanimously adopted at the final session on May 11. No reference committee was appointed, and, with minor changes, the resolutions were approved as presented. The resolutions are printed elsewhere in this issue of The Journal.

Amendment Defeated

The proposed amendment to the Constitution, which would provide for the election of councillors by delegates from councillor districts, was rejected, having failed to muster a two-thirds majority of the delegates present and voting.

Group Health and Accident Insurance

Several reports were submitted to the House of Delegates, including a report from the special committee named to make a study of proposed group health and accident insurance for the members of the State Medical Association. This report was made by the chairman, Dr. J. L. Patterson, of Logan, in which it was recommended that the plan submitted by Continental Casualty Company be accepted and approved. Previously, the Council had approved the report of the committee. The House of Delegates unanimously accepted the report rendered by Doctor Patterson, and

SCIENTIFIC WORK COMMITTEE

Dr. Paul H. Revercomb, of Charleston, has been named by Dr. Thomas G. Reed, president elect of the West Virginia State Medical Association, as chairman of the scientific work (program) committee. The other members are Dr. J. F. Barker, of Huntington, and Dr. Carl E. Johnson, of Morgantown.

This committee will arrange the scientific program for the 82nd annual meeting of the Association in 1949

approved the recommendations made by the committee. The report is also published elsewhere in this issue of The Journal.

Section on Urology

Dr. C. A. Hoffman, secretary of the newly organized West Virginia Urological Association, appeared before the House of Delegates to ask for the creation of a new section on urology. The establishment of this section had already been approved by the Council. The matter was favorably acted upon by the House of Delegates, and the section on urology becomes the sixth section to be organized within the Association.

1949 Convention City

The matter of the selection of the convention city and date for the 82nd annual meeting in 1949 was referred to the Council.

NPC Representative Speaks

Dr. Arthur L. Conrad, Ph.D., associate administrator of the National Physicians Committee, was invited to appear before the House of Delegates at the second session on Tuesday afternoon. He submitted an interesting report concerning meetings recently held in Washington. He also was guest speaker at a dinner meeting sponsored by the West Virginia Physicians Committee that evening.

President's Emblem

Dr. Thomas Bess, president of the West Virginia State Medical Association, presided at both sessions of the House of Delegates. At the second session on May 10, with Dr Wade H. St. Clair, Chairman of the Council, in the chair, Doctor Bess was presented with the President's Emblem, a gold charm which is presented annually to the President in recognition of his services to organized medicine in West Virginia.

Resolution of Thanks

At the close of the second session, the House of Delegates unanimously adopted a resolution, submitted by Dr. James L. Wade, of Parkersburg, thanking the Cabell County Society and Auxiliary for their hospitality during the meeting, and also thanking the Associated Press, United Press, the Huntington Advertiser, the Herald-Dispatch, and the Sunday Herald-Advertiser for their excellent coverage of the convention.

Near-Record Attendance

Nearly five hundred doctors were registered during the three-day annual meeting. To be exact, 496 doctors were registered at the booth at the Governor Cabell Hotel. This number is fifty-five short of the record high established at the meeting in Charleston, 1947. There is no doubt that a new record would have been set had it been possible to obtain hotel rooms for all of the doctors who wished to attend the convention.

The overall registration was 591, and in addition the Auxiliary reports a registration of 125, for a grand total of 716 guests at the convention.

22nd CONSECUTIVE TERM

Dr. T. Maxfield Barber, of Charleston, who was reelected treasurer of the West Virginia State Medical Association at the annual meeting in Huntington, has served in that capacity for twenty-one consecutive terms. He was first elected at the 59th annual meeting in Morgantown, in 1926, to succeed Dr. Hugh G. Nicholson, who recently died in California.

Changes in Program

There were two last-minute changes in the program. Dr. George F. Lull, secretary and general manager of the AMA, could not make the trip to Huntington, and the general session scheduled for Tuesday evening, May 11, was canceled.

Dr. J. Stewart Rodman, of Philadelphia, was prevented from appearing on the program on May 12, on account of personal illness. In his stead, Dr. Calvin Smyth, also of Philadelphia, presented a paper on, "Modern Trends in Gallbladder Surgery." Doctor Smyth is professor of surgery at the Postgraduate Medical School at the University of Pennsylvania.

DR. SUMMERS WINS GOLF TROPHY

Dr. R. R. Summers, of Charleston, was the winner of the championship trophy awarded as a result of the golf tournament held at the Guyan Country Club, in Huntington during the 81st annual meeting of the West Virginia State Medical Association. Other awards were made as follows: Low puts, Dr. H. W. Angell, Charleston; blind bogey, Dr. L. E. Neal, Clarksburg; most fives, Dr. James R. Brown, Huntington; most sixes, Dr. Boyd F. Brown, Huntington; and low net, Dr. Charles E. Watkins, Oak Hill.

Doctor Summers now has two legs on the championship trophy, tying with Dr. Charles E. Watkins. The winner of three tournaments will retain the trophy.

The tennis tournament was abandened when it was found that not a sufficient number of doctors had entered to justify play.

SUNNY SIDE UP

Purely selfishly, a sense of humor is a necessary armamentarium for a doctor. Without it, a successful practitioner could not continue surrounded as he is by the petty jealousies and back-biting of the smaller, humorless minds. He must recognize constitutional inadequacy and not allow it to trouble him unduly.

By maintaining his own sense of humor, the successful physician will command more respect. Position alone does not carry with it respect. A man is respected for two qualities; his ability and his personality. The proper sense of humor is a large part of one's personality. This is the reason the understanding, kindly janitor may command more respect than the stuffy, mirthless professor.—Bulletin, Medical Society County of Kings (N. Y.)

COUNCIL CLEARS HEAVY CALENDAR AT PRE-CONVENTION MEETING

One of the heaviest calendars ever considered by the Council of the West Virginia State Medical Association was cleared during a five-hour pre-convention session held in Huntington, May 9.

After confirming the action taken by a poll by mail in approving the new fee schedule for "home-town" medical care of veterans, the Council debated the requested renewal of the new contract for the period ending June 30, 1949. Practices affecting doctors residing in Huntington, Wheeling, Clarksburg, and Martinsburg, where veterans hospitals and clinics are maintained, were discussed and it was ordered that action concerning the renewal of the contract be postponed, and that a special committee from the Council be appointed to present these complaints to the central office at Washington.

The chairman, Dr. Wade H. St. Clair, of Bluefield, appointed as members of the committee Dr. Thomas Bess, the president, and Drs. James S. Klumpp, of Huntington, and M. H. Porterfield, of Martinsburg.

The committee was empowered to act for the Council and was directed to call upon the Veterans Board of Review to serve with them in an advisory capacity. The members of the board are Drs. James R. Brown, Claude B. Smith, and Paul H. Revercomb.

Dr. G. G. Irwin, of Charleston, and Dr. R. H. Edwards, of Welch, were reelected members of the Publication Committee. Doctor Irwin's new term will expire December 31, 1952, and Doctor Edwards' term, December 31, 1953.

Following the suggestions and recommendations of the Publication Committee, the business manager of the West Virginia State Medical Journal was given the additional title of "managing editor," effective immediately.

Dr. Francis A. Scott and Dr. Ivan R. Harwood, of Huntington, appeared on behalf of the orthopedists and urologists practicing in West Virginia and asked that a special committee be appointed to endeavor to obtain a revision upwards of fees paid by the Workmen's Compensation for this class of work, particularly injuries which require the services of an orthopedic surgeon. The chairman was directed to appoint a committee of three members to investigate the matter from the standpoint of the specialist, the general practitioner, and the patient. The committee was also directed to consult with the compensation commissioner with reference to his position on the subject of an increase in fees, and to report back to the Council.

The chairman appointed as members of the special committee Drs. F. A. Scott and Ivan R. Harwood, of Huntington, and Dr. Howard A. Swart, of Charleston.

Dr. William L. Cooke, of Charleston, Chairman of the Tuberculosis Committee, appeared before the Council, at the direction of his committee, to request that the Council's action taken at a previous meeting in rejecting complete subsidy for tuberculous patients be rescinded. He also asked approval of the action of his committee in recommending to the legislature the appropriation of a sum equivalent to five dollars per day for each bed in West Virginia sanatoria.

Dr. Harry L. Howell, of Madison, also a member of the Tuberculosis Committee, appeared in opposition to the request for free hospitalization for all tuberculosis patients.

The Council approved the resolution presented by Doctor Cooke asking for a raise in rates for sanatorium beds, but again rejected the request that it recede from its position on the complete subsidization of beds in state sanatoria.

Dr. L. Rush Lambert, who was appointed by the president, Dr. Thomas Bess, as a representative of the State Medical Association at a meeting on National Emergency Medical Service, recently held in Chicago, submitted an oral report concerning the two-day meeting. It was ordered that the Council go on record as being in favor of extending all possible aid to Governor Clarence W. Meadows in creating a state council on emergency medical care.

The following members were elected to honorary lifetime membership in the State Medical Association: J. E. Offner, Fairmont; J. C. Peck, Moundsville; Charles W. Petty, Hartford; Walter L. Johnston, Princeton; H. G. Steele, Bluefield; E. S. Bippus, Wheeling; and H. E. Gaynor, Parkersburg.

The following honorary lifetime members were nominated for Affiliate Fellowship in the American Medical Association: Mary J. Fausler Fortney, Hundred (now located at Urichsville, Ohio); and H. R. Johnson, Fairmont.

The policy of the Council in directing that dues of medical veterans be waived for the consecutive year following their release from the service was rescinded. The policy was adopted as a war measure during World War II. The new ruling is effective January 1, 1949.

It was also ordered that, effective at the beginning of the new year, the long-time custom of mailing certificates of membership to members be abandoned, and that evidence of the payment of annual dues be restricted to the issuance of a membership card.

The executive secretary was directed to abide strictly by the regulations which fix April 1 of each year as the deadline for payment of annual dues. For many years, delinquent members have been carried on the roster until late June or July, as a matter of courtesy to members who in many cases have stated that there has been a misunderstanding concerning the time within which dues must be paid. Under the by-laws, dues are payable annually on January 1, and hereafter the names of members who have not paid dues by April 1 must be removed from the roster.

If the delinquent member pays dues any time during the calendar year thereafter, he may be reinstated as a member. If the dues are not paid by December 31, he may be restored to membership only by election by his society.

Responding to a request of Mr. W. R. Fugitt, of Beckley, executive secretary of the West Virginia High School Athletic Association, it was ordered that

the three-member committee appointed to study revision of Workmen's Compensation fees, meet with Mr. Fugitt to endeavor to agree upon a fee schedule that may be used by athletic departments of county boards of education.

The request submitted by Kanawha Mental Hygiene Association for approval of its objects and purposes was referred to Kanawha Medical Society for consideration, and it was ordered that the Council's approval be given to the project if favorable action is taken by the local society.

Dr. Thomas G. Reed, chairman of the special committee appointed to consider the request of the insurance commissioner that he be furnished with a definition of "hospital care" and "medical care," reported that his committee had met with a similar committee from the Hospital Association of West Virginia, and representatives from several of the non-profit medical and hospital service plans in this state. The members of Doctor Reed's committee agreed upon definitions which Doctor Reed reported, are not acceptable to the Hospital Association.

Doctor Reed reported that his committee had agreed upon definitions as follows:

> "Hospital Care: Hospital care is defined as 'provision of bed, board, general nursing service, customary surgical dressings and medicine, and other facilities of the institution, not including medical care.'
>
> "Medical Care: Medical care is defined as 'any procedure or service by a licensed physician and/or his trained personnel operating under his direction and supervision'."

It was ordered that the definitions submitted by Doctor Reed's committee be accepted and approved by the Council and that the insurance commissioner be notified of the action taken.

The Council went on record as unanimously approving the establishment in West Virginia of a four-year school of medicine of West Virginia University.

Many additional routine matters were acted upon before the Council finally adjourned at 5 p. m.

The meeting was attended by the following officers and members: Dr. Wade H. St. Clair, chairman; Dr. Thomas Bess, president; Dr. Harold Van Hoose, second vice president; Dr. T. M. Barber, treasurer; Drs. Andrew E. Amick, John P. Helmick, Russell B. Bailey, M. H. Porterfield, Fred R. Whittlesey, E. H. Hunter, A. R. Sidell, James S. Klumpp, J. L. Patterson, J. C. Lawson, Thomas G. Reed, and D. C. Ashton; and Mr. Charles Lively, secretary ex officio

ORIENTATION COURSE IN ALLERGY

An orientation course in allergy has been arranged by the committee on postgraduate education of the University of Pittsburgh School of Medicine, and will be given over a series of ten Thursday afternoons, beginning September 2, 1948. The course will include didactic, laboratory and clinical presentations in allergy and all the related specialties. Address all inquiries to Samuel P. Harbison, M.D., Chairman Committee on Postgraduate Education, Dean's office, School of Medicine, O'Hara Street, Pittsburgh, Pennsylvania.

SECTIONS AND SOCIETIES ELECT NEW OFFICERS AT ANNUAL MEETING

A new section on urology was created by the House of Delegates of the West Virginia State Medical Association at the annual meeting at Huntington, May 10-12, 1948. The section, which will take over the functions of the West Virginia Urological Association, which was organized in Huntington last September, is the sixth section to be organized within the Association. The following officers were elected for 1948-1949: G. G. Irwin, Charleston, president; Ray M. Bobbitt, Huntington, vice president; and C. A. Hoffman, Huntington, secretary-treasurer.

During the annual meeting in Huntington, the West Virginia Society of Anesthesiologists was organized. The Society is composed of West Virginia members of the American Society of Anesthesiologists, and the new organization plans to apply for membership in the American Society. Dr. Delmas E. Greeneltch, of Wheeling, was elected president; Dr. John F. Morris, of Huntington, vice president; and Dr. A. B. Bowyer, of Charleston, secretary-treasurer.

Several of the sections and affiliated societies and associations elected officers at luncheon and dinner meetings held during the Huntington meeting. New officers for the West Virginia Academy of Ophathalmology and Otolaryngology, a section of the State Medical Association, will be elected at the interim meeting which will be held this fall. Officers of other sections and societies were elected as follows:

New Officers

Section on Industrial Health: V. L. Chambers, Huntington, president; and H. M. Brown, Belle, secretary.

Section on Internal Medicine: Raphael J. Condry, Elkins, president; and Pat A. Tuckwiller, Charleston, secretary.

Section on Pediatrics: Thomas G. Folsom, Huntington, chairman; and Warren J. Parsons, Huntington, secretary.

Section on Surgery: Bert Bradford, Jr., Charleston, chairman, and John D. German, Huntington, secretary.

West Virginia Heart Association: William A. Thornhill, Charleston, president; and Fred Richmond, Beckley, secretary-treasurer.

West Virginia Ob. and Gyn. Society: W. E. Hoffman, Charleston, president; and H. G. Steele, Bluefield, secretary-treasurer.

West Virginia Association of Pathologists: W. T. McClure, Wheeling, president; Walter J. G. Putschar, Charleston, president elect; and Melford L. Hobbs, Morgantown, secretary-treasurer.

Dr. L. Rush Lambert, of Fairmont, was elected president of the West Virginia Chapter of the Medical College of Virginia Alumni. He succeeds Dana T. Moore, of Parkersburg. James R. Brown was elected vice president, and L. E. Neal, of Clarksburg, secretary-treasurer. The annual dinner meeting of the MCV Alumni Association was attended by over eighty members and guests.

CONSULTATION SERVICES OFFERED BY BUREAU OF INDUSTRIAL HYGIENE

Potential occupational diseases present one of the major public health problems in West Virginia, inasmuch as one-third of the entire population is employed in some type of industry.

According to Dr. N. H. Dyer, state health commissioner, one of the services offered by the bureau of industrial hygiene, is the investigation of suspected cases of exposure to materials which may be the causative factor of occupational diseases.

At the request of private physicians, plant management, and labor, such surveys are constantly being made by the bureau. The surveys include engineering appraisal and laboratory analysis, together with recommendations for the control of the existing problem.

Some studies recently made in West Virginia include dust surveys, with particular emphasis on silicosis; solvent vapors, such as benzol, carbon tetrachloride, and various paint thinners; poisonous dusts, such as lead, and cadmium; various acid and alkali exposures; radiation exposures, such as x-rays and gamma rays; poisonous gases, such as carbon monoxide and hydrogen sulfide; and the various physical entities, such as heat, light, humidity and air velocities.

Consultation services are offered to the physician and management by the bureau for assisting in the formation of a nursing program designed to meet the needs of a particular industry, together with follow-up visits to the plant nurse.

A library of the latest information on industrial toxicology and public health practices in industrial medicine is maintained by the bureau. This informational material, together with various publications of the bureau, will be mailed upon request made to the Bureau of Industrial Hygiene, State Departmnet of Health, Charleston 5, West Virginia.

RELOCATIONS

Dr. M. H. Bertling, formerly of McComas, who has been located at Rock Creek, Ohio, has moved to Greensboro, North Carolina, where he will continue the practice of his specialty of obstetrics, with offices at 204 W. Newlyn Street.

* * * *

Dr. Peter G. Kroll, formerly of Welch, who has been located at Mt. Carmel, Pennsylvania, has moved to Cortland, Ohio, where he will continue the practice of his specialty of surgery.

* * * *

Dr. Lewell S. King, of Phillippi, member of the staff at Myers Clinic Hospital, has moved to College Park, Georgia, where he will continue the practice of his specialty of surgery, with offices at 912 North Main Street.

* * * *

Lt. Col. Harold A. Conrad (MC), USA, formerly of Elkins, is now assigned to the Valley Forge General Hospital, at Pleasantsville, Pennsylvania. He is chief of the surgical staff at this 2000-bed hospital. Colonel Conrad was called to active duty in 1940, serving throughout World War II. He has been in the regular Army Medical Corps since early in 1947.

MRS. W. E. HOFFMAN INSTALLED AS PRESIDENT OF THE WOMAN'S AUXILIARY

Mrs. W. E. Hoffman, of Charleston, was installed as president of the Woman's Auxiliary to the West Virginia State Medical Association at the 24th annual meeting held at Huntington, May 10-12, 1948. She had previously been elected president at the annual meeting held in Charleston, in 1947, and will serve until the next annual meeting in 1949.

Mrs. Dana T. Moore, of Parkersburg, was named president elect, and other elective officers were installed as follows:

First vice president, Mrs. J. Preston Lilly, of Charleston; second vice president, Mrs. Ross P. Daniel, of Beckley; third vice president, Mrs. Raymond H. Curry, of Barboursville; fourth vice president, Mrs. R. U. Drinkard, Jr., of Wheeling; recording secretary, Mrs. C. J. Holley, of Wheeling; and treasurer, Mrs. J. F. McCuskey, of Clarksburg.

Mrs. W. E. Hoffman

Mrs. Hoffman served as president of the Kanawha Auxiliary, 1943-44, and as vice president of the State Auxiliary during the same period. She was chairman of the State Auxiliary program committee from 1944 until 1947, and was first vice president, 1946-47. She served as president elect during 1947-48.

Mrs. Allen Honor Guest

Several luncheons and social affairs were arranged for the 1948 meeting, which was attended by 125 members. Mrs. Eustace A. Allen, of Atlanta, Georgia, President of the Woman's Auxiliary to the American Medical Association, presided at the installation of officers and was the speaker and honor guest at one of the luncheons.

Committee Chairmen Appointed

After her installation as president, Mrs. Hoffman announced the appointment of Mrs. A. C. Chandler, of Charleston, as corresponding secretary. Chairmen of standing committees were also named as follows:

Archives, Mrs. Herbert Beddow, Charleston; Exhibits, Mrs. Eugene S. Carter, Jr., Alloy; Finance, Mrs. Gilbert Ratcliffe, Huntington; Historian, Mrs. Edward W. Hickson, Fairmont; Hygeia, Mrs. Junior W. Myers, Wheeling; Legislation, Mrs. Ralph Jones, Charleston; Necrology, Mrs. F. Carl Chandler, Bridgeport; Parliamentarian, Mrs. U. G. McClure, Charleston; Program, Mrs. L. D. Norris, Fairmont; Editor of News Bulletin, Mrs. Wm. A. Thornhill, Jr., Charleston; Press and Publicity, Mrs. John W. Hash, Charleston; Post-War Planning and Public Relations, Mrs. Charles Goodhand, Parkersburg; and, Revisions, Mrs. S. S. Hall, Clarksburg.

Special Committee Chairmen

Mrs. Hoffman also announced the appointment of the following chairmen of special committees:

Bulletin, Mrs. John C. Condry, Charleston; Nurse Recruitment, Mrs. D. E. Greeneltch, Wheeling; Southern Medical Representative, Mrs. Ralph S. McLaughlin Charleston; Speakers Bureau, Mrs. George F. Evans, Clarksburg; Credits and Awards, Mrs. T. U. Vermillion, Beckley; and, Special Projects, Mrs. Ralph Hogshead. Montgomery.

Delegates to AMA Meeting

The following delegates and alternates will represent the Auxiliary at the June, 1948, meeting of the Woman's Auxiliary to the American Medical Association, at Chicago.

Delegates: Mrs. Dana T. Moore, Parkersburg; Mrs. F. Carl Chandler, Bridgeport; Mrs. V. Eugene Holcombe, Charleston; Mrs. K. G. Khorozian, Pineville; Mrs. George P. Heffner, Charleston; Mrs. Ralph S. McLaughlin, Charleston; Mrs. W. E. Hoffman, Charleston, ex officio; Mrs. U. G. McClure, Charleston, ex officio. Alternate: Mrs. Thomas Blake, St. Albans.

Mrs. Chandler's Address

On Monday, May 10, the president, Mrs. F. Carl Chandler, of Bridgeport, appeared on the program with Dr. Thomas Bess, president of the State Medical Association. Mrs. Chandler's complete address is as follows:

"I bring you greetings from the 687 members of your Auxiliary.

"Since each of us, as the wife of a physician, has a fixed and lasting obligation to uphold the dignity and safeguard the ideals of one physician, so collectively, as an Auxiliary, it is our mission to help preserve the basic rights and ideals of organized medicine.

"In his address at the 1947 Conference of state auxiliary presidents and presidents elect, Dr. Edward L. Bortz, president of the American Medical Association, stated that 'the members of the Woman's Auxiliary are the greatest asset the American Medical Association has, and at the same time the most neglected—the more we share with you our problem, the more effectively can you carry on and help us to solve them. The finest public relations counsel the doctor, lawyer or business man has is his helpmate. You have a great role to play that has not even begun to be approached.'

"The activities of the Auxiliary are based entirely upon four objectives. Because the organization is an auxiliary, it cannot function independently but must be guided in all of its endeavors by the West Virginia State Medical Association.

"The first objective of the Woman's Auxiliary to the West Virginia State Medical Association, as stated in the Constitution, is to extend by the aid of its members, the aims of the medical profession which look to the protection of public health and to the advancement of health education.

"In considering this objective, it is evident that Auxiliary members must know the aims of the medical profession before we can extend them to other organizations or undertake any kind of public relations work.

"This year we have stressed self-education to the end that better understanding be reached with the public in the interest of good health. Auxiliary members have been urged to read the Journal of the American Medical Association, the State Medical Journal, the Auxiliary Bulletin, and current articles in newspapers and magazines pertaining to public health, health education, and medical legislation.

"The second objective is one that the Auxiliary has always been pleased to observe—To fulfill such functions as may be desired from time to time by the West Virginia State Medical Association.

"Very few specific requests have been made by the Council of the West Virginia State Medical Association. The last request that was made of the Woman's Auxiliary was in 1943 when members were formally requested to plan and carry out 'an educational program which would help defeat the Wagner Bill S-1161.' At that time, a Speakers Bureau, with a roster of approved speakers for lay organization programs, was formed. We have continued this service to lay groups. This year eleven speakers were provided for as many lay organizations.

"Other requests have come from year to year as a result of conferences between the advisory board and officers of the Auxiliary. The Essay Contest was a result of a conference with our advisors at our annual meeting here in Huntington, two years ago. The purpose of the contest was to reach as many people in our state as possible with authentic information concerning the 'truths of so-called socialized medicine.'

"The Auxiliary had worked for two years preparing this contest, securing authentic source materials, soliciting funds for the prizes, and selecting judging committees. The advisors had approved the contest and it was ready to be submitted to the schools this year, when circumstances beyond our control made it necessary to discontinue the project.

"The third objective is of current interest. The founders of the Auxiliary saw the need of providing entertainment and instruction for women who accompany their husbands to annual meetings. Accordingly, the Auxiliary has for many years planned programs and assisted in the entertainment at medical meetings.

"The fourth objective is 'to stimulate the spirit of cooperation and fellowship through the common bond of friendship.' Friendliness among families of physicians cannot be too greatly emphasized. This is the basis of good Auxiliary work, and if we fail in this part of our program we cannot succeed in any other part.

"Doctors' wives as individuals are affiliated with many lay women's groups. A well informed doctor's wife can be an asset to the organization with which she is affiliated, to the community in which she lives, and to the medical profession with which she is associated.

"The Woman's Auxiliary to the West Virginia State Medical Association desires most earnestly through its members, to extend the aims of the medical profession to all organizations which look to the advancement of health.

"In order to perform this important function in the social environment of today, the Woman's Auxiliary needs the cooperation of every doctor's wife and of every member of the medical profession."

VITAL STATISTICS REPORT—FIRST QUARTER

Vital statistics for the first quarter of 1948 showed a reversal in form for the same period in 1947. According to the records in the State Department of Health, births totalled 10,188, twelve per cent less than last year. The decrease was not unexpected as the number of births reported for the year 1947 was the highest ever recorded.

Deaths during the first quarter were up seven per cent over the corresponding period last year. No change was noted in the sequence of the five leading causes of death in West Virginia, diseases of the heart accounting for 969, cancer, 396, cerebral hemorrhage, 378, accidents, 299, and pneumonia and influenza, 293. Tuberculosis, in seventh place, took a toll of 158 during the first quarter.

Deaths from the more common communicable diseases showed the same trend, measles accounting for 14, which was the total number reported for the first six months in 1947. Last year, there were no deaths from diphtheria in the first quarter, but nine deaths were reported for the same period this year. The number of cases of reportable diseases recorded for the first quarter, compared with the same quarter last year, is shown in the following table:

Disease	*1948*	*1947*
Measles	4,201	1,088
Influenza	1,599	8,036
Chickenpox	686	513
Whooping Cough	339	259
Scarlet Fever	363	279
Pneumonia	335	226
Diphtheria	76	46
Poliomyelitis	6	4

LIMIT ON CUTS IN JOURNAL

At the annual pre-convention meeting of the Publication Committee held at Huntington, May 9, it was ordered that cuts used in connection with scientific articles in The Journal be limited to two per article, with a limit of six cuts being placed upon the number that may be used with any single paper. Cuts used in excess of two will be paid for by the author, and no cuts in excess of six may be used without the approval of at least three members of the committee.

PHC TO MEET JULY 5-7

The regular summer meeting of the public health council for the examination of applicants for license to practice medicine in West Virginia will be held July 5-7, 1948, at the Hotel Daniel Boone, in Charleston.

NARCOTIC LICENSES MUST BE RENEWED

Applications for renewal of narcotic license for the year ending June 30, 1949, must be returned to the Collector of Internal Revenue, at Parkersburg, on or before July 1, 1948.

GROUP HEALTH AND ACCIDENT POLICY APPROVED BY HOUSE OF DELEGATES

Dr. J. L. Patterson, chairman of a special committee appointed by the Council to consider the advisability of adopting a group health and accident policy for the members of the West Virginia State Medical Association, submitted his report at the First Session of the House of Delegates.

The report was accepted and the recommendations unanimously approved at the Second Session on Tuesday, May 11. The other members of the committee are Drs. Thomas G. Reed, and W. C. Swann.

The report is as follows:

A few months ago, in response to numerous requests from members of our association, the council appointed a committee to study the possibility of securing a statewide group health and accident insurance policy. Several proposals were submitted, most of which were identical.

After due consideration, the committee recommended to the council that the plan offered by the Continental Casualty Company be submitted to the House of Delegates for final approval. The Council so agreed.

The committee adopted this plan because it carries a higher weekly indemnity, and because the company underwriting the plan is financially able to carry out its contracts.

The following is an outline of the plan:

Rates and Coverage of Group Plan

Plan	*Weekly Indemnity*	*Principal Sum*	*Premiums* *Annual*	*Premiums* *Semi-Annual*
A	$75.00	$1,000.00	$110.00	$55.50
B	50.00	1,000.00	74.00	37.50
C	25.00	1,000.00	38.00	19.50

The individual member may choose either Plan A or Plan B, except that Plan A or B is not available to female members nor to members aged 65 or over.

COVERAGE—

The policy covers any accidental bodily injury sustained while the insurance is in force and any sickness or disease causing total disability beginning while the insurance is in force.

EXCLUSIONS—

The only exceptions are disabilities caused by pregnancy, private flying or war.

THE POLICY PAYS INDEMNITY FOR ACCIDENTAL INJURIES AS FOLLOWS:

Total Disability—Full weekly indemnity beginning with the FIRST DAY and payable up to FIVE YEARS.

Partial Disability—One-half the weekly indemnity payable up to FOUR WEEKS.

Accidental Death and Loss of Hands, Feet or Eyes—The Principal Sum is paid in addition to all other benefits if death or loss of hands, feet or eyes results within 180 days from the date of the accident.

Dismemberment—One-half the Principal Sum is paid for loss of one hand, one foot, one eye or loss of speech or hearing.

One fourth the Principal Sum is paid for loss of thumb and index finger of either hand.

THE POLICY PAYS INDEMNITY FOR SICKNESS AS FOLLOWS:

Total Disability—Full weekly indemnity beginning with the EIGHTH DAY and payable up to 52 weeks.

If hospitalized before the eighth day, weekly indemnity will start with the FIRST DAY of hospitalization and will be paid for those days of the first week spent in the hospital.

These benefits are available for EACH PERIOD of disability.

The Policy also provides IDENTIFICATION INDEMNITY up to $100.00.

What the Group Plan Offers

1. Sickness and Accidents of all kinds are covered irrespective of time of origin (pre-existing clause removed)
2. The policy of each Insured Member contains a non-cancellable and guaranteed renewable feature (cancellation clause removed).
3. House confinement is not required during the term of disability (confinement clause removed).
   All benefits are effective immediately as soon as the policy goes in force.
   Complete and full sickness and accident benefits are payable regardless of other insurance (pro-rating clause removed).
4. Premium does not increase with age.
   Benefits do not decrease with age .
   Plan requires only regular attendance of physician, not once every seven days.
   The principal sum benefits are payable in addition to other benefits of the policy and can never operate as a limitation to the Company's liability for loss of time benefits.
   Insuring clause for injury gives coverage on basis of "Accidental Bodily Injury," not "Accidental Means" or "Through violent and external means."
   Policy of Insured Member cannot be changed by endorsements or riders.
5. Savings in cost of 30%.
6. The policy wording is clear-cut with no hidden clauses or ambiguities.
   The policies, circulars and announcements are designed in such a manner as to eliminate confusion and misunderstanding.
   Continental Plan disregards the history or loss ratio of the individual and relies solely on the experience of the group as a whole.
   Insured has free choice of physician (other than himself, if a Doctor).
7. Claim procedure merely requires notice to Company or Company representative, and claim blank will be sent immediately.
8. West Virginia State Bar Association has had Continental Plan for a year and it has given complete satisfaction.

This plan, if approved by the House of Delegates, will be submitted to the individual members of the State Medical Association, and if and when fifty per cent of the members sign the contract, the master policy will become effective and the members who have signed the contract will be covered.

It is the opinion of this committee that this is a very good contract at a very low group rate, and it is hoped that the House of Delegates will approve the proposal.

Respectively submitted,

J. L. PATTERSON, M. D.
Chairman.

U.P. MEDICAL ALUMNI DINNER

A dinner meeting of the University of Pennsylvania Medical Alumni will be held at Chicago during the annual meeting of the American Medical Association. The dinner is scheduled for Wednesday, June 23, at the Lake Shore Club. Interested alumni may make reservations upon their arrival in Chicago, by contacting Miss Frances R. Houston, executive secretary, at the University of Pennsylvania registration booth.

DR. VAN LIERE TO BE HONORED

Dr. Edward J. Van Liere, of Morgantown, dean West Virginia University School of Medicine, will have the degree of Doctor of Literature conferred upon him June 8, at the commencement exercises of the Medical College of Virginia, at Richmond.

Resolutions Adopted

The following resolutions were unanimously adopted at the Second Session of the House of Delegates at the 81st annual meeting in Huntington, May 11, 1948:

1. By Herbert M. Beddow, M. D., for the Committee on Mental Hygiene: Adequate salaries for health workers.

WHEREAS, the State Department of Health and the mental and tubercular hospitals in West Virginia are unable to obtain and hold qualified personnel due to (1) inadequate salaries and unsuitable maintenance, and (2) lack of security and freedom from political implications; and,

WHEREAS, an act of the legislature is necessary to correct these existing faults:

BE IT RESOLVED, That the House of Delegates refer the following resolutions to the fact finding committee for later action by the legislative committee of the West Virginia State Medical Association:

1. Place the state health commissioner and the personnel of his department and the state institutions under the merit system, thus eliminating political consideration in connection with these appointments.

2. Remove statutory limits on salaries, and endeavor to have adequate appropriations made to enable payment of salaries comparable to those paid in other states and commensurate with the qualifications and work performed by the individual employee.

3. Seek sufficient appropriations to raise housing conditions at all institutions to an acceptable level.

BE IT FURTHER RESOLVED, That a copy of this resolution be given to the press if approved by the House of Delegates.

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2. By Pat A. Tuckwiller, M. D.—Study of Colorado Plan.

BE IT RESOLVED, That the Kanawha Medical Society recommends that the president of the West Virginia State Medical Association either appoint a special committee or refer to an existing committee (such as the fact finding committee) the study of the Colorado Plan of Public Relations for the advisability of the adoption of a similar plan by the State Medical Association, and that report be made as soon as possible to the Council of the West Virginia State Medical Association.

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3. By James L. Wade, M. D.—Financial and legal aid for non-profit medical-surgical plans.

WHEREAS, Several of the various component medical societies of the West Virginia State Medical Association are for the most part responsible for the success of medical-surgical plans, or so-called Blue Shield plans in their communities and in this state; and,

WHEREAS, There is an indication that in the near future certain complications may arise in regard to

payment to irregular practitioners for alleged medical services through medical surgical benefits:

BE IT RESOLVED, That the House of Delegates of the West Virginia State Medical Association recommend to the Council that financial, legal and other assistance be offered and made available to any non-profit medical-surgical plan in the state needing the same, should the occasion arise.

4. By Frank J. Halrayd, M. D.—Enlargement of the School of Medicine at West Virginia University.

WHEREAS, West Virginia University as a whole has more than doubled its enrollment in the past twenty years; and,

WHEREAS, the School of Medicine at the University is less than half as large as it was twenty years ago; and,

WHEREAS, this puts a big burden on the pre-medical students of West Virginia due to the difficulty in getting other states to accept such West Virginia students:

NOW, THEREFORE, BE IT RESOLVED, That the Committee on Medical Education of the West Virginia State Medical Association be instructed by the House of Delegates to cooperate with the authorities at West Virginia University in every way possible in the matter of the immediate enlargement of the School of Medicine to its former size.

5. By J. F. Barker, M. D.—Approval of Activities of the National Physicians Committee.

WHEREAS, the members of the House of Delegates of the West Virginia State Medical Association recognize the aggressive and effective efforts on the part of the National Physicians Committee for the extension of medical care during the last eight years; and

WHEREAS, through the efforts of the National Physicians Committee, the public has been enlightened and informed of the contributions and achievements of the medical profession:

THEREFORE, BE IT RESOLVED, That the House of Delegates of the West Virginia State Medical Association affirms its confidence in and approval of the activities of the National Physicians Committee, and urges the individual physicians of the State of West Virginia to render financial and moral support to said activities in the fullest degree.

6. By Walter E. Vest, M. D.—Support of Meharry Medical College.

BE IT RESOLVED, That the House of Delegates of the West Virginia State Medical Association go on record as favoring the plan now being considered by the Governors of the southern states to support Meharry as a regional colored Grade A medical school.

7. By W. C. Stewart, M. D.—Increase in bed pay at state tuberculosis sanataria.

WHEREAS, The present appropriation for the care of tuberculous patients in West Virginia state sanatoria is only $3.02 per bed per day; and,

WHEREAS, The present cost per patient day at the three state sanatoria is between $3.21 and $3.82; and,

WHEREAS, Many beds are vacant in these institutions due to this discrepancy in cost; and,

WHEREAS, The appropriation per patient day is much higher in other states and is necessary to give tuberculous patients adequate care:

THEREFORE, BE IT RESOLVED, That the House of Delegates of the West Virginia State Medical Association urge the budget director, the board of public works and the members of the Legislature to appropriate a sum equivalent to $5.00 per day for each bed in the West Virginia state sanatoria.

PHC LICENSES 24 DOCTORS

As the result of the examination conducted by the Public Health Council in Charleston, April 5-7, 24 doctors have been licensed to practice in this state, 19 by direct examination, and five reciprocity.

The following doctors were licensed by direct examination: William Riley Ballard, Jr., Van; Kenneth Gordon MacDonald, Charleston; Arnold Robert Marks, Clarksburg; David Herman Miller, Clarksburg; and Benjamin Franklin Montague, Jr., Charleston.

The following is the list of doctors licensed by reciprocity:

Hosea Charles Ballou, White Sulphur Springs; Joseph Alcott Bowles, Jr., Fairmont; Roy Eugene Christie, Bluefield; John Wallace Compton, Jr., Ronceverte; Richard Anton Cuonzo, Eunice; Herbert Grasty Dickie, Jr., Wheeling; William Arch Dorsey, Beckley;

Roscoe Douglas Doss, Denmar; Ellery Theodore Drake, Williamson; Emil Gribovsky, Huntington; William Wilkinson Guthrie, Huntington; Edward Knapp Hawke, Huntington; Nathan Ples Horner, Madison;

Semon Monash Lilienfeld, Parsons; Merritt Clifford Mauzy, Elkins; Harris Preston Pearson, Bluefield; John Dickinson Peck, Summersville; Carmelo Leonard Terlizzi, Huntington; and James William Thompson, Bradshaw.

SUMMER DIARRHEA IN BABIES

Casec (calcium caseinate), which is almost wholly a combination of protein and calcium, offers a quickly effective method of treating all types of diarrhea, both in bottle-fed and breast-fed infants. For the former, the carbohydrate is temporarily omitted from the 24-hour formula and replaced with 4 packed level tablespoonfuls of Casec. Within a day or two the diarrhea will usually be arrested, and carbohydrate in the form of Dextri-Maltose may safely be added to the formula and the Casec gradually eliminated. One to three packed level teaspoonfuls of a thin paste of Casec and water, given before each nursing, is well indicated for loose stools in breast-fed babies. For further information, write to Mead Johnson & Company, Evansville 21, Indiana.

Annual Reports*

REPORT OF EXECUTIVE SECRETARY

Activities of the West Virginia State Medical Association, curbed in many ways during the war and the immediate post-war period, resumed a more or less normal course with the beginning of the year 1947.

Since the last annual meeting, various standing and special committees have been active and much important work has been accomplished. There have been many more of such meetings than usual and the attendance has been satisfactory, notwithstanding the fact that several winter meetings have had to be postponed on account of severe and unusual weather.

The Legislature will meet in regular session in January, 1949, and the groundwork of an important legislative program is being laid by the Council, the Legislative Committee, and the Fact Finding and Planning Committee. It will be necessary for these committees to meet frequently before the legislature convenes. The members will no doubt be called upon for hard work during the interim between meetings. The committees are enthusiastically at work on the program that has been outlined, and the complete program should be ready for submission to the Council and component societies early in the fall.

Membership Statistics

During the past year, the Association has sustained a loss of twenty-five members by death and thirty-six by relocation in other states. These losses are more than offset by the election of 114 new members. We now have 112 honorary lifetime members. This compares with ninety-nine at this time last year. All but nine of our members who served in the armed forces during World War II have returned to civilian practice.

For the second consecutive year, there has been a substantial increase in total membership, reversing the trend that was all too apparent during the war years. At this time (May 10) in 1946, the membership totaled 1,302. In 1947, we had a total of 1,349 members, a then all-time high. Since May, 1947, we have had a further net gain of 53 members. As of this date, we have 1,402 members.

Membership by Societies

The membership by component societies as of May 10 is as follows:

Barbour-Randolph-Tucker	48
Boone	15
Brooke	7
Cabell	155
Central West Virginia	56
Doddridge	2
Eastern Panhandle	31
Fayette	54
Greenbrier Valley	30
Hancock	22
Harrison	83
Kanawha	247
Logan	34
Marion	60
Marshall	19
Mason	6
McDowell	62
Mercer	54
Mingo	27
Monongalia	51
Ohio	98
Parkersburg Academy	88
Potomac Valley	28
Preston	21
Raleigh	62
Summers	10
Taylor	10
Wetzel	10
Wyoming	12

1948 Honor Roll

The following component societies are on the 1948 honor roll, having reported a one hundred per cent paid-up membership:

Barbour-Randolph-Tucker, Brooke, Central West Virginia, Doddridge, Eastern Panhandle, Harrison, Logan, Mason, Mercer, Mingo, Potomac Valley, Raleigh, Summers, Taylor, Wetzel, and Wyoming.

Component Societies

Many local societies and auxiliaries have been visited during the past year. One improvement is noted particularly. This pertains to attendance. The increase in the number of members who are attending local meetings is really quite noticeable. Several factors are responsible: Dinner meetings in the evening, worthwhile scientific programs, and the feeling on the part of members that with World War II at an end, it is possible to take a more active interest in the affairs of organized medicine.

Spurred by visits from the president, Dr. Thomas Bess, and moved by his recommendation that monthly meetings supplant those held quarterly, a few of the component societies which have been holding meetings quarterly are now considering the advisability of scheduling meetings monthly in the future.

Lay Groups Interested in Public Health

Several engagements to address lay groups have been accepted. These include service and luncheon groups, women's clubs, PTA groups, farm organizations, and groups concerned with public health. Where a year ago, the subject apparently most popular for discussion was socialized medicine, the requests this year have for the most part centered upon subjects dealing with public health in West Virginia. These lay groups have also shown a great deal of interest in the proposed four-year school of medicine in West Virginia.

*Other reports were published in the May, 1948, issue of the West Virginia Medical Journal.

When the program for the 1949 session of the legislature has been completed by key committees, it is planned to discuss these problems personally before as many groups as may be possible before the legislature convenes on January 12, 1949.

The Journal

Very few losses in advertising carried in the Journal have been sustained during the past year. Some accounts have been withdrawn, but others obtained so that the volume remains about the same. There has been a tremendous increase in the cost of printing since the first of the year, and the Publication Committee has authorized consultations with advertisers and their agents with a view to having at least part of this extra cost absorbed by an increase in rates.

Sufficient scientific material is available to enable us to print an average of four papers in each issue. Members have been urged to submit papers for consideration by the Publication Committee, and if the receipt of manuscripts so warrants, the policy of printing four papers per issue will be continued.

The members of the Publication Committee are doing a fine job and are striving constantly to provide for our readers the very best original scientific material available.

On behalf of the headquarters staff, I extend thanks to the officers, councillors, committee members, officers of component societies and all of the members of the association and the auxiliary, for their cooperation and helpful assistance in the many important matters that have been considered and acted upon during the past year

Sincerely,

CHARLES LIVELY,
Executive Secretary.

COMMITTEE ON PRESIDENT'S ADDRESS

The president, Dr. Thomas Bess, has brought to us a subject which has been a No. 1 problem in West Virginia for many years,—the need for a four-year school of medicine. However, it has been pushed aside by some of the problems thought more important, such as socialized medicine, medical health insurance, and hospitals practicing medicine.

The president has presented this great need in a masterful way, with careful consideration to all details. He has called attention to several pertinent facts, particularly that a four-year medical school will improve the standard of medical practice in our state, improve the health of our citizens, and greatly facilitate our public health work.

There is no doubt, as has already been demonstrated in other states, that a program for better care of medical indigents can well be built around a medical school, but, most important, we will gain our medical independence and not have to depend upon our sister states to give our boys medical education.

Many of us have had the experience of having to use personal friendship, political influence, and other measures to get our sons into medical schools, and in a great many instances boys who are properly adapted and desire medical education cannot get it. This is all the more serious because there is a shortage of physicians, particularly in the rural areas, and the public is complaining that it is difficult to get doctors to make calls and provide proper medical care. Because of this shortage, the medical cults are flourishing and obtaining a strong foothold.

We are hoping that there will not be another war, but we all remember that when doctors were taken for service in the armed forces, many areas in this country did not receive proper medical care.

Our president sounded a keynote and it is the opinion of this committee that this project of a four-year school of medicine in West Virginia should be placed at the very head of our list of proposed projects. It is hoped that each member of the profession will use his influence with the proper authorities to obtain prompt action in providing a much needed four-year medical school in West Virginia.

Respectfully submitted,

RAY M. BOBBITT, M. D.,
Chairman.
R. O. ROGERS, M. D.
FRANK V. LANGFITT, M. D.

COMMITTEE ON CHILD WELFARE

The Committee on Child Welfare of the State Medical Association submits the following report:

The Committee endorses the plan now in effect for the care of premature infants, including the establishment of premature centers in selective locations, and reports that one has already been established and is in operation in South Charleston.

There are funds available from the state department of health to assist in the establishment of these centers in strategic points. Dr. Hallie I. Morgan, of the Department, will furnish full details upon request.

The committee is still working on a program for the care of the rheumatic child. A study is now in progress. The statewide pediatric survey conducted by the American Academy of Pediatrics was completed in November, 1947.

The data obtained is at present being studied and a final report will be available within a few months. This committee feels that every effort should be made to cooperate with all of the agencies working for the diagnosis, treatment, prevention and control of tuberculosis.

Respectfully submitted,

RUSSELL BOND, M. D.,
Chairman.

COUNCIL

At its pre-convention meeting held at Huntington, May 9, 1948, the Council went on record unanimously as approving the establishment in West Virginia of a four-year school of medicine of West Virginia University.

Respectfully submitted,

WADE H. ST. CLAIR, M. D.
Chairman.

COMMITTEE ON MATERNAL WELFARE

Instructions to midwives have been revised and brought up to date, and are in effect at the present time. This was done by the state department of health, with the committee on maternal welfare serving in an advisory capacity.

We recommend to the West Virginia State Medical Association that in the future the House of Delegates elect one member of this committee from each councillor district of the State Medical Association. The president of the State Medical Association will, as in the past, appoint the chairman of this committee.

It is suggested that these men elected by the West Virginia State Medical Association be urged, in their own councillor districts, insofar as is possible and feasible, to put into effect in each hospital, whether recognized or not by the American College of Surgeons, the recommendations of the ACS for the operation of an obstetrical department of the hospital. The plan outlined is to include particularly a review each month by the obstetrical staff of the particular hospital on each maternal or neo-natal mortality.

Your committee reports that we are recommending to the state department of health that the obstetrical lectures that were held in the different districts of the state in the pre-war years be resumed if possible in the summer of 1949.

Respectfully submitted,

ELIZABETH McFETRIDGE, M. D.,
Chairman.
W. E. HOFFMAN, M. D.
E. J. HUMPHREY, M. D.
H. G. STEELE, M. D.
CARL BICKEL, M. D.
M. B. WILLIAMS, M. D.

COMMITTEE ON SYPHILIS

The committee submits the following report:

1. Quantitative serologies have increasing importance in the management of penicillin treated cases of syphilis. The state hygienic laboratory could give this service if serologies were confined to indigent cases.

2. We recommend that the state hygienic laboratory do serologies only on indigent cases insofar as possible, and that no pre-marital serologies be done. This recommendation has been made before, but to the best of our knowledge, little or no action has been taken. We feel, then, that the state health commissioner should be asked to aid in the enforcement of these specific recommendations.

3. Drugs to be used in the treatment of venereal diseases should be furnished by the state only upon the certified statement of the doctor that the patient is indigent.

4. The name "Kanawha Valley Medical Center" should be changed to indicate that it is a state institution. It is suggested that the name "Kanawha" be deleted.

5. Recent reports indicate that penicillin alone in the treatment of syphilis is inadequate. Your committee, therefore, strongly recommends that at least three month's chemotherapy be used following penicillin.

6. We recommend to the legislative committee that an effort be made to have the legislature appropriate funds to maintain the state hygienic laboratory and to do an increased amount of field work in the epidemological control of syphilis. The apprehension and the diagnosis of these cases is the most valuable aid the state can render. These funds should be used to treat indigent cases only at the state treatment centers.

7. We recommend that the president appoint as chairman of the committee on syphilis one who has served as a member of the committee during the preceding year.

Respectfully submitted,

JOHN F. McCUSKEY, M D.,
Chairman.

NECROLOGY COMMITTEE

The following is a list of West Virginia doctors whose deaths during the past year have been reported to the West Virginia State Medical Association:

1947

April 20 ..... Aaron Burleigh Spahr, War
May 28 ..... Clement Coleman Fenton, Morgantown
July 10 ..... William Allen Cracraft, Jr., Wheeling
July 12 ..... Charles Patterson Nash, Alderson
July 25 ..... Jefferson B. Simons, Buckhannon
August 3 ..... Joseph Hallock Moore, Huntington
August 9 ..... Wyndham B. Robertson, Kearneysville
Sept. 18 ..... George Robert Miller, Fairview
Oct. 4 ..... George Delmont Jeffers, Parkersburg
Oct. 6 ..... Okey Warren Coplin, Elizabeth
Oct. 7 ..... William Henry Burgess, Williamson
Nov. 2 ..... William Dennis McClung, Huntington
Nov. 4 ..... William H. Hume, Beckley
Nov. 9 ..... Donald Edward MacIntyre, Kimball
Nov. 19 ..... David William Shirkey, Montgomery
Nov. 23 ..... John Nathan Simpson, Morgantown
Dec. 8 ..... David Barnard Lepper, Bluefield
Dec. 20 ..... Wilbert George Drinkwater, Gormania
Dec. 31 ..... Jones Ross Hunter, Charleston

1948

Jan. 2 ..... Charles Lesley Boyers, Parkersburg
Feb. 3 ..... Gordon Livingston Todd, Princeton
Feb. 20 ..... Leonidas William Cobun, Morgantown
Feb. 23 ..... Lonzo O. Rose, Parkersburg
Feb. 25 ..... Charles Whitall Root, Ravenswood
Mar. 21 ..... William B. Scherr, Morgantown
Mar. 22 ..... Ira Clay Hicks, Huntington
Mar. 23 ..... John Emmerson Whitehill, Huntington
Mar. 24 ..... Winfield Scott Smith, Philippi
Mar. 29 ..... William Hoye Kunst, Fairmont
Apr. 9 ..... Frank Kane Lyon, Parsons
Apr. 11 ..... Edward Davis, Salem
Apr. 19 ..... Frederick S. Casto, Charleston

Apr. 27 ..... Guy Hinsdale, Charlottesville, Va.
Apr. 29 ..... Chester A. Hutchinson, Mammoth

Requiescant in pace.

Respectfully submitted,
HARRY G. STEELE, M. D.,
Chairman,
ROY BEN MILLER, M. D.,
ROBERT J. REED, M. D.,
JAMES McCLUNG, M. D.,
JAMES R. BLOSS, M. D.,
T. JUD McBEE, M. D.

FORT STEUBEN PG ASSEMBLY

The Fort Steuben Academy of Medicine has annouced its first annual postgraduate assembly, which will be held June 10, in the Masonic Temple, at Steubenville, Ohio. The assembly will be an afternoon and evening affair. An elaborate dinner program has been arranged.

The following program will be presented during the meeting:

Max Minor Peet, M.D., Ann Arbor, Michigan,—"Hypertension."

Bela Schick, M.D., New York City,—"Modern Infant Immunization."

S. O. Freedlander, M.D., Cleveland, Ohio,—"Medical and Surgical Approach to Pulmonary Tuberculosis."

Ross Golden, M.D., New York City,—"Intestinal Obstruction."

The assembly will convene at 1:30 o'clock (DST), and end with the dinner program at 6:30 o'clock.

Dr. R. E. Flood, of Steubenville, is the secretary-treasurer of the Academy, and information concerning the assembly may be obtained by addressing him at 380 Summit Avenue, in that city.

ORTHOPIC TRAINING

It is well to bear in mind that orthopic training in the large majority of cases is only a part of the treatment of concomitant strabismus. The other part constitutes surgery used in conjunction with orthopic training. A complete cure for strabismus would mean the attainment of binocular single vision with stereopsis and sufficient reserve vergence power (fusional reserve) to allow comfortable use of the eyes over an extended period. However, the ophthalmologist should not feel too doleful if the ulitmate in success has not been reached, provided that a good cosmetic result is attained.

The person who suppresses vision in one eye is comfortable in that condition and it frequently occurs that neither the patient nor the parents of a young patient will devote the energy and expense necessary to gain normal binocular vision after a good cosmetic effect has been obtained by surgery. Yet it should be emphasized that a perfect result gained when orthopic training has been used is much more likely to remain permanent than merely a cosmetic effect where binocular single vision is not attained.—J. T. M. in Digest of Ophthalmology and Otolaryngology.

LONGER LIFE IN PROSTATIC CANCER

It is seven years since the investigation on the effect of endocrines on prostatic carcinoma was begun. In this short period the management of this dread disease has been completely revolutionized.

A life expectancy of one to two years has been lengthened to an average of three years, during the most of which time the sufferer lives in comparative comfort. With early recognition and radical surgery the lives of a great many of these patients can be further prolonged. Instead of a relapse after several years, estimated now at 50 per cent of the cases, many five to ten year recoveries should be reported. In this series, which covers a period of about five years, the average life expectancy of the patients who have been followed, over 50 per cent of the total group, is 3 years for those still living and 3.4 years for those who have died. No case is reported as cured, although several patients lived seven years.

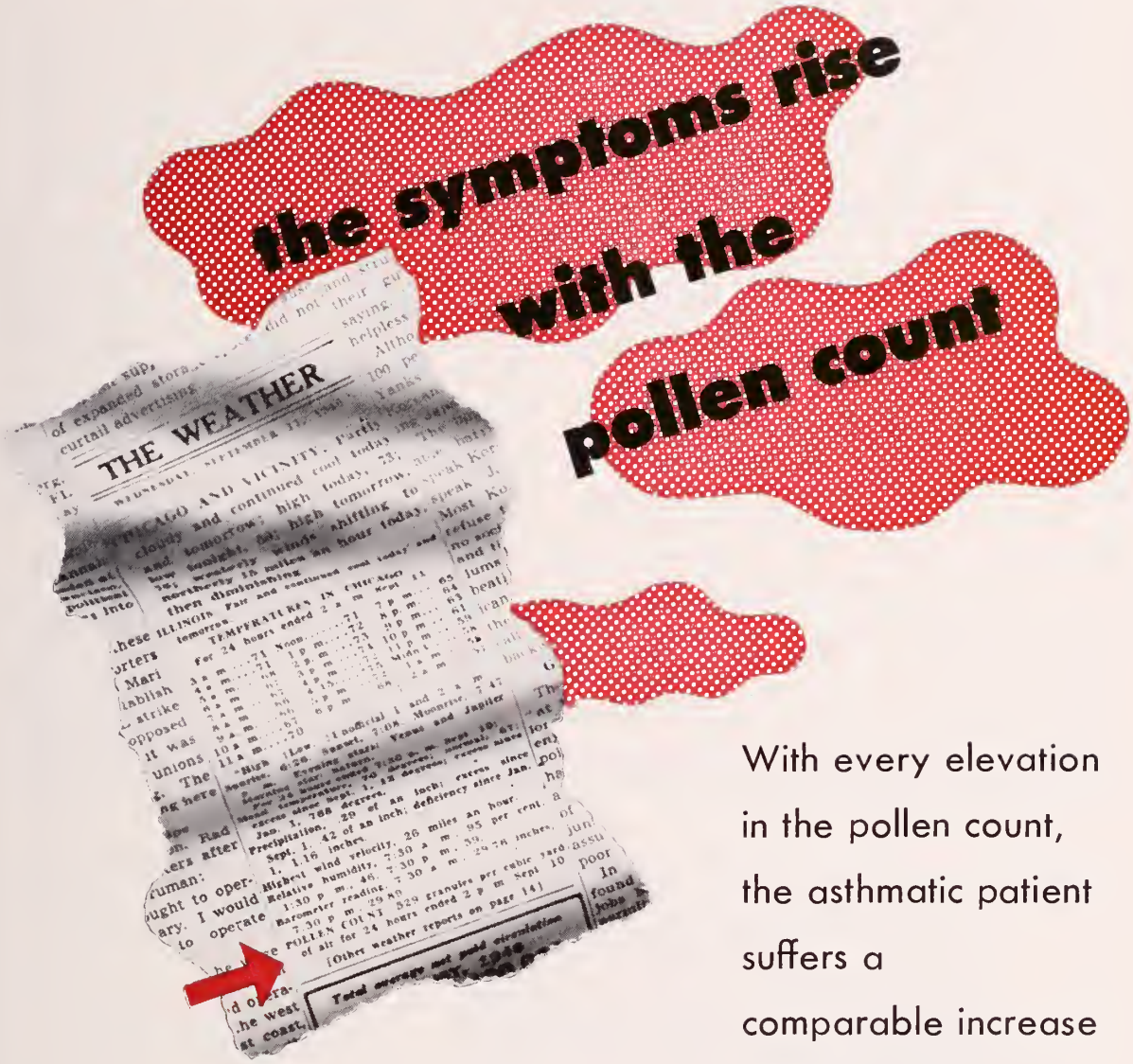
It is hoped that in the recent cases covering the past two years, due to early recognition and prompt radical surgery, survivals of five to ten years will be the rule rather than the exception.—Ralph P. Beatty, M. D., in Pennsylvania Medical Journal.

NEURO ALLERGY IN CHILDHOOD

It is a matter of common experience that the asthmatic child, although amenable normally, becomes irritable and disagreeable in the extreme during an asthmatic seizure. This nervous excitability is usually considered to be the result of the discomfort of the attack aggravating the child or of pampering by oversolicitous parents. This is, for the most part, true, but numerous cases have been reported by Shannon and other allergists in which high-strung, nervous, unruly, and disagreeable children, who showed none of the accepted manifestations of allergy, have been found to be hypersensitive to certain foods, most commonly wheat. When the offending proteins were removed from the diet, these children's mental attitudes toward life have changed, and in a few weeks the spoiled, irritable child has become happy, contented, and friendly.—T. Wood Clarke, M. D., in N. Y. St. J. Med.

FAMILIAL AND ACQUIRED ALLERGY

In the field of allergy we frequently talk about the familial (inherited) and the acquired type of sensitiveness. Beyond any question of a doubt one can frequently distinguish between the eruption caused by ingention of food, medicants, etc., in contradistinction to the rashes resulting from contacts, but it is also obvious that occasionally the identical rash may result from either contact or ingestion. This makes one wonder whether the demarcation is as clear cut between an acquired sensitivity and the so-called familial sensitivity (atopic, inherited, etc.) as some would have us believe, or whether all who show allergic manifestations are not born with this allergic tendency, the only difference being in the type of response which has been shown to be similar in cases of ingestion and contact regardless of the method of entrance of the allergen.—Martyn A. Vickers, M. D., in J. Maine Med. Assn.



With every elevation in the pollen count, the asthmatic patient suffers a comparable increase in the severity of symptoms. In the dyspnea of allergic asthma, Aminophyllin has been found to provide efficient relief.

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DIABETES ABSTRACTS*

DOLGER, HENRY: Clinical Evaluation of Vascular Damage in Diabetes Mellitus, J.A.M.A. 134:1289 (August 16), 1947.

The incidence of vascular degeneration is, in spite of adequate insulin and diet regulation, higher in diabetics than non-diabetics. These changes are apparently inevitable and seem not to be influenced by even the most thorough control of diabetes. Joslin reported evidence of vascular damage in 70 per cent of 250 juvenile diabetics, and Wagener at the Mayo Clinic commented on the increased frequency of retinal changes in young people.

The author observed 200 patients in whom the onset of diabetes was discovered before the age of 50. Fifty-five of these were below 20 when the disease was first noticed. Twenty young patients who satisfied criteria for successful control of diabetes were found to have retinal hemorrhages with an average duration of diabetes for thirteen years when the earliest lesions were noticed. When retinal changes developed, 50 per cent of the patients had hypertension and 30 per cent, albuminuria.

In 18 patients in whom only a fair degree of control could be obtained, retinal hemorrhages occurred after an average duration of diabetes for ten years. One third of this group had hypertension and albuminuria. In 17 patients, diabetes existed in a severe form and was difficult to control. Retinal hemorrhages were found after an average of 12 years, and hypertension was present in 40 per cent of the patients. Albuminuria was present in 60 per cent of this group.

The author cites two contrast cases, the first a boy whose diabetes began at 4, and the second a girl whose treatment was begun at 9. In the former case, attempts to keep the child on a calculated diet were futile. He consumed over 400 grams of carbohydrate a day but never had an episode of ketosis in spite of continuous glycosuria. Nevertheless the disease lasted for nineteen years before the earliest signs of vascular damage were apparent. In the case of the girl of 9, control of the disease was perfect and yet, after 22 years, retinal hemorrhages, albuminuria and hypertension developed.

The occurrence of retinopathy was a prelude to partial or total blindness in 27 of the 200 patients; five of these were juvenile diabetics. Furthermore, other vascular degenerative phenomena were found in the blind patients. Albuminuria occurred in all; hypertension, in 60 per cent.

The author concludes that the duration of diabetes mellitus rather than the success of treatment is the most important factor in the development of vascular changes.—D. C. A.

*The opinions expressed in these abstracts do not necessarily reflect the views of the members of the Diabetes Committee of the West Virginia State Medical Association.

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Obituaries

JOHN L. BOSWORTH, M. D.

Dr. John L. Bosworth, 91, of Elkins, died unexpectedly, May 14, at his home in Elkins. He was ill less than a day, and was engaged in active practice until the time of his death.

Doctor Bosworth was born at Beverly, October 1, 1856. He was located at Huttonsville for a short time, and then moved to Elkins where he was practicing at the time of his death. He graduated from Fairmont State Normal school in 1881, and received his M. D degree from the College of Physicians and Surgeons. Baltimore, in 1889. He was licensed to practice medicine in West Virginia that same year.

He was the son of Dr. Squire Bosworth, the first doctor to locate in the Elkins area after the close of the Revolutionary War. Two brothers, Dr. Perry Bosworth and Dr. A. S. Bosworth, preceded him in death.

Doctor Bosworth had served as president of the board of education of the Huttonsville district, and as a member of the board of education of Randolph county for six year.

He is survived by a daughter, Mrs. H. Bosworth Bell, of Pittsburgh, and a son, John W. Bosworth, who is an educator in North Carolina, and who served as superintendent of the department of public safety in this state during the administration of Governor Mansfield M. Neely.

* * * *

FREDERICK S. CASTO, M. D.

Dr. Frederick S. Casto, 81, of Charleston, died April 19, 1948, at his home in that city, following a heart attack.

Doctor Casto was born on a farm near Ripley, January 25, 1867. He received his M. D. degree at the

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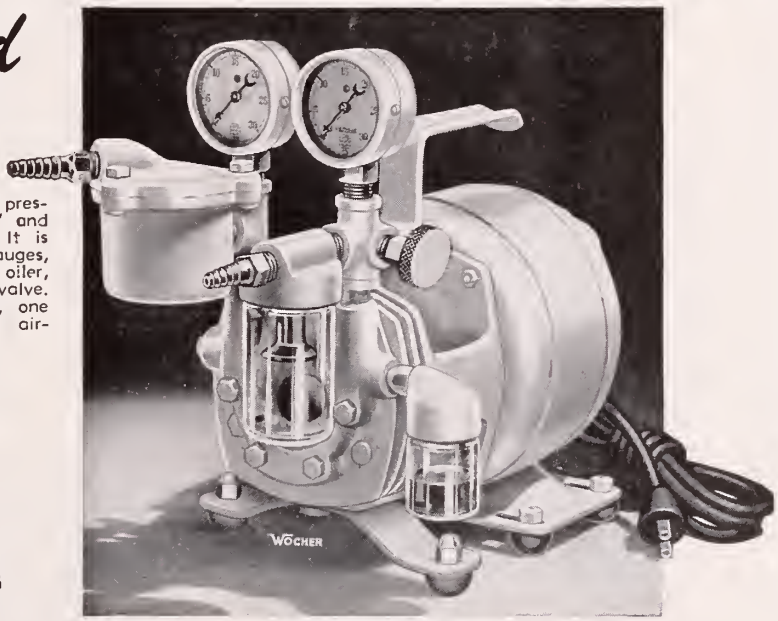

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University of Louisville School of Medicine in 1893, and was licensed that same year to practice medicine in West Virginia.

He located at Kenna, in Jackson County, where he practiced for thirty-one years. He moved to Charleston in 1924, where he remained in active practice until his retirement in 1942 on account of ill health.

While located at Kenna, he served as justice of the peace for four years. He was for several years president of the board of pension examiners of Jackson County. He is survived by two daughters, Mrs. Cordo O. Hambrick and Mrs. Wilma C. Rawling, both of Charleston and two sons, B. Cleo Casto, of Kenna, and Ronald H. Casto, of Logan. His wife, the former Dora B. Simmons, died in 1946.

* * * *

GUY HINSDALE, M. D.

Dr. Guy Hinsdale, 90, of Charlottesville, Virginia, died April 27, 1948, at his home in that city. He had been in ill health for several months.

Doctor Hinsdale was born in Brooklyn, New York. After completing his academic education at Amherst College (A. B. and A. M.), he enrolled at the University of Pennsylvania School of Medicine, Philadelphia, from which he received his M. D. degree in 1881. He interned at the Presbyterian and Episcopal hospitals in Philadelphia, 1881-83.

Doctor Hinsdale served as medical director at the Homestead, Hot Springs, Virginia, from 1904 until 1929. His specialty was medical hydrology and neurology. He accepted appointment as medical director at the Greenbrier, at White Sulphur Springs, in 1929, and served in that capacity until 1942, when the Army took over the Greenbrier for use as an Army hospital (Ashford General). He had been in semi-retirement since that time.

During World War I, he was a member of the medical staff named by the Navy to give instructions to newly commissioned officers of that branch of the service.

Doctor Hinsdale was an honorary lifetime member of the Greenbrier Valley Medical Society, the West Virginia State Medical Association, and the American Medical Association. He had served as vice president of the American Academy of Medicine, and secretary and president of the American Climatology and Clinical Association. He was also a member of the American Urological Association, and a member of the English-Speaking Union, American representative of the International Society of Medical Hydrology, and Fellow of the Royal Society of Medicine, London.

He was the author of a book on hydrotherapy, which is still being used as a standard text.

He is survived by his widow, and a daughter, Jean Hinsdale.

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WINFIELD SCOTT SMITH, M. D.

Dr. Winfield Scott Smith, 74, of Philippi, died of coronary occlusion, March 24, 1948, at his home in that city.

Doctor Smith received his M. D. degree at the University of the South Medical Department, Sewanee, Tennessee, in 1898. He was licensed to practice in West Virginia in 1901, and located at Philippi, where he remained until 1907, when he moved to Huntington. He engaged in practice there until 1919, when he returned to Philippi.

He served for several years as health officer for Barbour County, and was examiner for his local selective service board during World War I. He had a large practice in the rural areas of his home county, and was still in active practice at the time of his death.

Doctor Smith was a former member of the B-R-T Medical Society, the West Virginia State Medical Association, and the American Medical Association.

For every 1,000 veterans discharged, one is released with tuberculosis. Dr. John Barnwell of the Veterans' Administration predicts in the Health Pilot that tuberculosis among veterans will reach its peak in 1975.—R. N.

Book Reviews

CLINICAL DIAGNOSIS BY LABORATORY METHODS—A Working Manuel of Clinical Pathology—By James Campbell Todd, Ph.B., M. D., and Arthur Hawley Sanford, A. M., M. D., with the collaboration of George Giles Stilwell, A. B., M. D. Eleventh Edition. Pp. 954, with 397 figures. Philadelphia and London: W. B. Saunders Company, 1948. Price $7.50.

Since its appearance forty-odd years ago, this book has been the vade mecum of medical student, interne, and physician doing his own laboratory work, and of innumerable laboratory technicians. Always it has given the indication for the various tests, how to do them and what conclusions to draw from the results. The present—the eleventh—edition excels the high standards of its predecessors.

Drawing on the resources, material and personnel of the Mayo Clinic, Sanford has rearranged the contents and expanded the scope of the book. Noteworthy are the added sections on animal parasites and mycology, and the further expansion of the chapter on hematology.

A word of commendation is due the publishers. A book destined to serve, in part, at least, as a laboratory manual must of necessity be able to withstand far more hard usage than the usual text book. It must

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Surgical Anatomy & Clinical Surgery, Two Weeks, Starting July 6, August 16, September 27.
SURGERY of Colon & Rectum, One Week, Starting June 14, September 20.
Surgical Pathology Every Two Weeks.
UROLOGY—Intensive Course, Two Weeks, Starting September 27.
FRACTURES & TRAUMATIC SURGERY—Intensive Course, Two Weeks, Starting June 7, October 25.
OPHTHALMOLOGY—Intensive Course, Two Weeks, Starting September 20.
Refraction Methods, Four Weeks, Starting October 11.
Ocular Fundus Diseases, One Week. Starting June 7, November 15.
GYNECOLOGY—Intensive Course, Two Weeks, Starting September 13.
Vaginal Approach to Pelvic Surgery, One Week Starting September 27.
OBSTETRICS—Intensive Course, Two Weeks, Starting June 21, September 27.
MEDICINE—Intensive Course, Two Weeks, Starting October 11.
Personal Course in Gastroscopy, Two Weeks, Starting June 28, July 12.
Electrocardiography & Heart Disease, Two Weeks, Starting August 2.
DERMATOLOGY—Formal Course, Two Weeks, Starting October 4.
Clinical Course Every Two Weeks.
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be able to "take it." In addition, type and charts must be easily read. Obviously Saunders had all this in mind in the make-up of this work This is a stout book—both in content and in structure.—G. G. I.

MINOR SURGERY—By Frederick Christopher, M. D., F.A.C.S., Sixth edition. 1058 pages, 937 illustrations on 595 figures. Philadelphia and London: W. B. Saunders Company, 1948. Price, $12.00.

Christopher's *Minor Surgery* is a well-written, well-organized book with a wealth of surgical information not, however, necessarily limited to the minor field.

The material is especially adapted as a text for the surgical intern and resident. The chapters on "Minor Surgical Techniques" and "Pre and Postoperative Care" should be required reading for every surgical house officer.

The general practitioner will find this book an excellent handy reference. It contains up-to-date methods of diagnosing the vast majority of surgical conditions as well as the modern techniques for carrying out uncomplicated surgical procedures.

The book has always been popular in the past and the Sixth Edition contains all the important advances since publication of the Fifth Edition.—John C Condry, M. D

Australia boasts of a new type of iron lung which, operated by hydraulic action, can be attached to an ordinary water faucet.—R. N.

DOCTOR HOLROYD GUEST SPEAKER

Dr. Frank J. Holroyd, of Princeton, will be one of the speakers at the annual National Conference of County Medical Society Officers, scheduled for the Palmer House, in Chicago, June 20, the day preceding the opening session of the A. M. A. Convention. He will discuss "The County Medical Society, its Part in Medical Organization," and his subject will consist of three parts, (a) relation to the State Medical Association, (b) relation to the A. M. A., and (c) relation to other medical organizations—N. P. C., A. A. P. S., Blue Cross, A. M C. P., Academy of General Practice, etc.

Doctor Holroyd has served for two years as area chairman of the conference, and is also chairman for West Virginia.

The announced purpose of the conference is "to develop a working partnership between the A .M. A. and every physician."

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TUBERCULOSIS ABSTRACTS*

STREPTOMYCIN IN TUBERCULOSIS

Although attempts to attack tuberculosis by chemotherapeutic means are as old as our knowledge of the disease, it was not until 1940 that Feldman, Hinshaw and Moses reported that promin had a striking effect on tuberculosis induced in guinea pigs. Attempts to use this and a few other drugs clinically followed. The results were suggestive but never fully convincing, possibly because the sulfone compounds were found to be too toxic in the dosage required for treatment of human beings.

From the first, the antibiotic *streptomycin* gave great promise as an agent for suppressing tuberculosis. In early reports Schatz and Waksman noted that a human strain of Mycobacterium tuberculosis was sensitive to streptomycin *in vitro* and further investigations by Feldman and Hinshaw proved conclusively that streptomycin would arrest and at times apparently eradicate well established tuberculosis in the hightly susceptible guinea pig.

The clinical use of streptomycin for tuberculosis was begun in December, 1944, and has been used by the author and his colleagues in more than 100 cases of tuberculosis of various types. At present (March, 1948) more than 500 additional patients are being treated with streptomycin at selected institutions under the auspices of the American Trudeau Society as well as a large number elsewhere.

In all discussions of the therapeutic possibilities of streptomycin in tuberculosis the situation must be viewed in proper perspective. The ability of streptomycin to suppress the disease is unique and at times apparently remarkable. The limitations of streptomycin are just as real. Because of certain toxic potentialities, its inadequacy in some clinical situations, and the expense of prolonged periods of treatment, the indiscriminate use of streptomycin in the treatment of tuberculosis must be discouraged.

The use of streptomycin in tuberculosis is indicated in all forms of *hematogenic disease*, including generalized miliary tuberculosis and meningitis, the prognosis of which has hitherto been regarded as hopeless. Of 12 patients who had disease of this type and were treated with streptomycin at the Mayo Clinic, four are living after six to 12 months. In treating tuberculous meningitis it is imperative that streptomycin be given both parenterally and intrathecally and as early as possible in the course of the disease.

Streptomycin in Tuberculosis, H. Corwin Hinshaw, M. D., Marjorie M. Pyle, M. D., and William H. Feldman, D. V. M., The American Journal of Medicine, May, 1947.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Association.

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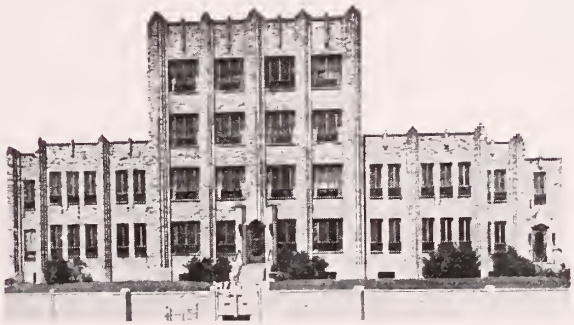

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Surgery: HU C. MYERS, M. D.
LEWELL S. KING, M. D.

Gynecology and Obstetrics: EDNA MYERS JEFFREYS, M. D.

Anatomic Pathology: S. D. WU, M. D.

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County Society News

FORT HENRY ACADEMY

Dr. James J. Lee, associate professor of urology at the University of Pittsburgh School of Medicine, and senior urologist to the medical center was the guest speaker at the regular monthly meeting of the Fort Henry Academy of Medicine held April 27 at Wheeling. His subject was "Confusing Problems in the Diagnosis of Abdominal Lesions from the Standpoint of the General Surgeon and Urologist."

The paper was discussed by Dr. A. E. Winston, of Steubenville, Ohio, and Dr. R. D. Gill, of Wheeling.

D. E. GREENELTCH, M. D.,
Secretary.

* * * *

McDOWELL

Dr. R. O. Gale and Dr. Dante Castrodale were the guest speakers at the regular monthly meeting of the McDowell County Medical Society, held April 14, at Welch.

Doctor Gale presented a case report on "Dissecting Aneurysm of the Abdominal Aorta" and a paper, with two case reports, on "Congenital Heart Lesions." Doctor Castrodale presented a paper on "Cor Triloculare Biventriculare and Patent Ductus Arteriosus." A general roundtable discussion followed the presentation of these two papers.

DANTE CASTRODALE, M. D,.
Secretary.

* * * *

MERCER

At the regular monthly meeting of the Mercer County Medical Society, held at the Pinnacle Restaurant, in Bluefield, April 14, the delegates to the annual meeting of the House of Delegates at Huntington were instructed to offer a resolution providing for the immediate expansion of the school of medicine at West Virginia University to twice its present size.

The Society adopted a resolution providing for the free hospitalization of all turberculous patients at state sanatoria.

FRANK J. HOLROYD, M. D.,
Chairman.

* * * *

RALEIGH

Dr. P. J. Robecheck, of St. Luke's Hospital, Cleveland, Ohio, was the guest speaker at the regular monthly meeting of the Raleigh County Medical Society, held April 15, at the Swan Cafe, in Beckley. His subject was "Carcinoma of the Breast." The speaker stressed the importance of biopsy and amputation if there is any question whatsoever as to the possibility of malignancy.

At the business session following the scientific program, Dr. Wallace B. Lilly was elected to membership.

W. FRED RICHMOND, M. D.,
Secretary.

Woman's Auxiliary

HARRISON

The Woman's Auxiliary to the Harrison County Medical Society was hostess at a Tri-County luncheon meeting held May 6 at the Clarksburg Country Club, at Clarksburg. Mrs. J. F. McCuskey, first vice president of the state Auxiliary, was the guest speaker. Her subject was, "The Woman's Auxiliary." Addresses were also presented by Mrs. James C. Repass, of Lumberport, retiring president; Mrs. John P. Helmick, and Mrs. F. Carl Chandler, president of the State Auxiliary. Mrs. A. J. Weaver presented a reading, "The Doctor's Wife."

The following chairmen of committees were named by Mrs. Lynwood D. Zinn, who was installed as president at the meeting:

Bulletin, Mrs H. H. Haynes; Hygeia, Mrs. J. E. Wilson, Jr.; Social, Mrs. C. N. Slater; Membership, Mrs. L. H. Mills; Public Relations, Mrs. F. Carl Chandler; Program, Mrs. R. K. Hanifan; Historian, Mrs. Harry V. Thomas; Publicity, Mrs. Jack Gocke; Telephone, Mrs. R. B. Linger; Exhibits, Mrs. D. H. Lough; Legislation, Mrs. John F. McCuskey; and, Radio, Mrs. Joseph Gilman.

* * * *

KANAWHA

At the April luncheon meeting of the Woman's Auxiliary to the Kanawha Medical Society, held at St. Mathew's Parish House, in Charleston, the following officers were named for the ensuing year:

President, Mrs. John W. Hash; president elect, Mrs. W. A. Thornhill; first vice president, Mrs. P. A. Tuckwiller; second vice president, Mrs. Charles Staats; third vice president, Mrs. J. P. Lilly; corresponding secretary, Mrs. Hunter Boggs; recording secretary, Mrs. N. H. Newhouse; and treasurer, Mrs. John Jarrett.

Mrs. William Marshall presented an address on "Children's Mental Hygiene," and Mrs. Rachel Ferguson, chief nutritionist for the state department of health, discussed "Nutrition for Children."

Mrs. Jack Basman,
Corresponding Secretary.

* * * *

PARKERSBURG ACADEMY

Mrs. A. Morgan Dearman, of Parkersburg, was elected president of the Woman's Auxiliary to the Academy of Medicine of Parkersburg at the April meeting, held at the Chancellor hotel in that city. Other officers were elected as follows:

President elect, Mrs. M. A. Santer; first vice president, Mrs. W. W. Davis; second vice president, Mrs. Paul L. McCusky; recording secretary, Mrs. R. W. Corbitt; corresponding secretary, Mrs. H. W. Ulch; and treasurer, Mrs. L. W. Hovis, Jr.

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AVAILABLE FOR GENERAL PRACTICE—Office on Quarrier Street, in Charleston. Three rooms, ground floor, remodeled office building. Owner leaving in September on account of poor health. Address Box M-1, West Virginia Medical Journal, Box 1031, Charleston 24, West Virginia.

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Mrs. Annie Locke MacKinnon, librarian at the Marietta public library, reviewed a book, "Insides Out," by John Mason Brown, in which the experiences and adventures of a young drama critic who attended his own "opening" in a hospital are related.

The meeting was in charge of Mrs. Charles L. Goodhand, the president, and was attended by forty members and guests.

Mrs. Athey R. Lutz,
Corresponding Secretary.

* * * *

RALEIGH

The regular monthy meeting of the Woman's Auxiliary to the Raleigh County Medical Society was held April 19 at the Beckley Hotel, at Beckley, with Mrs. W. C. Covey, the president, presiding. The guest speaker, Mrs. Arthur C. Chandler, of Charleston, presented an interesting review of Alan Paton's "Cry, the Beloved Country."

The following officers were elected for the ensuing year: President, Mrs. J. E. McKenzie; president elect, Mrs. H. A. Shaffer; vice president, Mrs. M. M. Ralston; secretary, Mrs. W. H. Rardin; and treasurer, Mrs. H. S. Edwards.

Mrs. Fred Richmond,
Secretary.

MEDICAL SCHOOL BUDGETS LOW

The financial needs of the faculties of most of our medical schools, the teachers who must train the physicians of the future to care for the entire population in health and disease, continue to be neglected. Very few schools have an income and budget which enable them to compete for medical teachers against the lure of private practice.

There are 70 approved medical schools in the United States. They have a combined active teaching faculty of 1,516. There are also 292 well-organized hospital maternity divisions with approved residencies. The department heads and chiefs in the obstetric divisions of these schools and hospitals do not change overnight. There are currently 2,395 Diplomates of the American Board of Obstetrics and Gynecology and, in addition, approximately 4,800 mature and well-qualified clinicians who have not seen fit to seek Board Certification. Surely, out of these two groups replacements can be found which will meet with general approval on the basis of experience and teaching ability.

Organized medicine, state medical societies, and school alumni associations should take on as one of their most urgent tasks a campaign to increase these state school budgets sufficiently to enable them to pay adequate salaries to department heads, or to include the privilege of private practice. This will attract the kind of leaders such departments should have.—Joseph L. Baer, M. D., in Am. J. Obstetrics and Gynecology.

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DEBUNKING PUBLIC RELATIONS

The "Public Relations" of the profession is merely the computation of the incidence of good and bad relations between individual doctors and individual people.

Public health, good or bad, is the health of individual people, added up. Public relations, good or bad, is the relations of individual people, added up.

You treat bad public relations like you treat public syphilis: one case at a time. If the nation's maternal mortality rate is too high, the work of a "public obstetrics" expert won't lower it except as he is able to educate and improve the work of the people who practice obstetrics.

Doctors decry impersonalized mass treatment in their field, yet they are everywhere busily applying impersonalized mass treatment in the public relations field. It won't work in medicine; it won't work in public relations.

It just isn't feasible for us to hire someone to have our relations with others for us. It is a job we have to do ourselves. It's like making love; satisfactory results are obtained only when you do it yourself, even if you aren't an expert.

Employed experts can't have relations with people *for* you. Nothing on earth can make people like you while you are doing things they dislike. The profession can get help to *learn* what to do to build satisfactory relations, but doctors themselves will have to do the building.

Common sense points the way to good public relations for medicine. The primary requirement is that the individuals who comprise medicine—all physicians—earn good relations with the individuals who comprise the public—all patients. There is no short-cut, no easier way.

Medicine will have made its first step toward the acquisition of good public relations only when doctors learn from progressive thinkers within their ranks that the best guide to desirable medical public relations will be found in their own code of ethics. Thoroughly and completely debunked, public relation is, in every sense, nothing more nor less than fundamental human relations.—Rollen Waterson in Bulletin, Alameda County (Cal.) Medical Association.

Dr. Helen B. Taussig and Dr. Alfred Blalock have been named co-winners of the annual award of the Passano Foundation, established in 1944 by the medical publishing house of Williams and Wilkins to aid medical research. Dr. Taussig is the first woman to win the award. She and Dr. Blalock, members of the faculty at Johns Hopkins Medical School, developed the famed "blue baby operation," a procedure which has been utilized in more than 600 cases at Johns Hopkins since it was first performed in 1944.—R. N.

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SPECIALIZATION AGAIN

Since there is no more popular subject among the medical profession than specialization, and since everyone is talking about it, we feel that another discussion of the subject will be repetitious, but at the same time we are entitled to it.

There are certain basic factors at work in this country which cannot be stayed by discussion, nor will the tide turn until it has run its course. That force is one of education. The colleges are an outstanding example of the desire on the part of the average person in this country to acquire a college education and the same force has extended itself into the medical profession by post-graduate education.

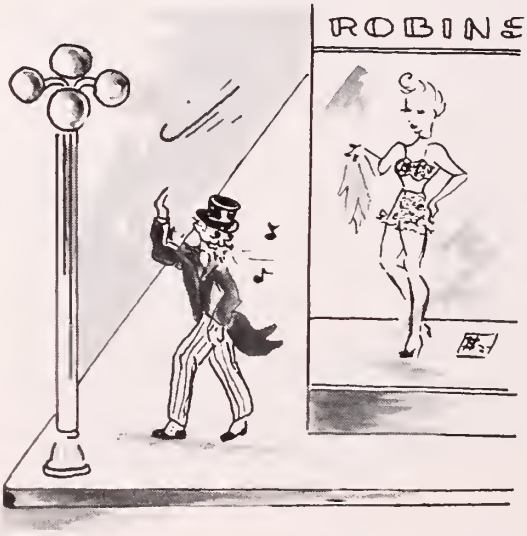
A second major point in specialization is realization by the medical student that medical knowledge has advanced to such a stage that no man can know all there is to know about medicine, or even know all there is to know about any one branch of medicine and if the reader will reflect back, he will see that even in the past ten years, or twenty years, or thirty years, actual knowldege about medical subjects has advanced and increased in such a measure that it seems almost unbelievable.

As a result, the medical student who is being trained in the basic courses of medicine, quickly realizes that he can never gather enough information to become an expert in all subjects and he must confine himself to branches of medicine. This is an inevitable trend in the development of our social system and it will have to run its course, and should. Equal credit, however, should go to the men doing general practice, because in our opinion, they are as much a specialist as anyone who is confining himself to a single field. After all, to know something about nearly everything in medicine is as complicated as to know everything about any one subject in medicine.

Perhaps the time has arrived when the general practitioner should consider that he is specializing in the practice of general medicine. At any rate, it is our opinion that all doctors are now specializing in their particular field of medicine, in obstetrics, dermatology, or general practice, and the wholesome result of cheap competition serves to make better doctors of the men who are coming out of the medical schools today and serves to strengthen the position of the medical profession in the minds of the people of our country.—G. K. K. in Bull. Columbus Academy of Medicine.

STREPTOMYCIN IN TUBERCULOSIS

The determination of the therapeutic effect of any drug on tuberculosis is difficult to evaluate because of the chronic course of the disease and its natural tendency to regress under conservative management. There is, however, no question regarding the effectiveness of streptomycin in several types of tuberculosis which were formerly almost always fatal.—James J. Feffer, M. D., in Medical Annals of the District of Columbia.



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WEST VIRGINIA UNIVERSITY AND MEDICAL EDUCATION IN WEST VIRGINIA*

By IRVIN STEWART, Ph. D., President,
West Virginia University
Morgantown, West Virginia

At the outset, I should like to lay a foundation for my later remarks about the problem of medical education in West Virginia. As you know, for many years the state has provided a two-year medical program in the School of Medicine of West Virginia University. Every suggestion which I have heard for an expansion of medical education in the state has assumed that it would be in connection with the University, and this assumption is in accord with the development of medical education in the United States over the past few decades. As a part of West Virginia University, the School of Medicine is necessarily influenced by the total University picture. Let's look at that picture for a few minutes.

Many years ago the people of West Virginia came to the conclusion that there should be but one state university. This decision has been justified by subsequent history. It was supported by the recommendations of the Strayer Committee, which made a study of public education in West Virginia, and which incorporated the following statement in its final report: "A state of the size and resources of West Virginia can maintain but one institution that will rank as an effective university."

The University is composed of twelve different schools and colleges. In addition to the College of Arts and Sciences and the Graduate School, there are ten professional schools whose fields are pretty well indicated by their titles: Agriculture, Forestry and Home Economics; Education; Engineering and Mechanic Arts; Journalism; Law; Medicine; Mines; Music; Pharmacy; and Physical Education and Athletics. Each of these schools is devoted to an area of importance to the people of West Virginia. From time to time the suggestion is made that we should have still other professional schools as, for example, a school of dentistry, a school of veterinary medicine, or a school of business administration.

Before rushing out to establish new schools, let us look for a moment at the support which is being given to our present activities. Just the other day, I ran across a speech which my predecessor, Dr. Lawall, made in 1939, in which he said: "There have been no buildings erected on the campus which have provided classrooms and laboratories since the Chemistry Building was built in 1925. During the last fourteen years the University has expanded tremendously in the number of students that have been enrolling as well as in the number of new schools and departments which have been added to the University but our physical plant has not been expanding to keep pace with this growth."

Since Dr. Lawall spoke nearly nine years ago, one permanent classroom building has been erected at the University; that is, one permanent classroom building in the last twenty-three years. At the time Dr. Lawall spoke, he referred to the fact that the University would probably have in the fall of 1939 an enrollment of 3100 students, "which is the largest number that we have had at the beginning of the school year." Last fall we registered more than 6600 students, more than twice the number expected by Dr. Lawall at

*Presented before the West Virginia State Medical Association, at Huntington, May 12, 1948.

a time when the physical plant was already inadequate. In 1941, the university Sub-Committee of the State Planning Board estimated the University's building needs at approximately $11,900,000. This figure was in terms of 1941 building costs, and reflected the needs of a student body of approximately 3300.

Some progress has been made. The Legislature appropriated $2,000,000 for building construction at the University in 1941, and continued the availability of that sum during the period when building construction was at a standstill. The 1947 Legislature added an additional million dollars; and plans are now well advanced for the construction of a new classroom building and a new biology building with these funds. Even with these two new buildings, however, it seems probable that the University needs a minimum of $15,000,000 in new buildings to be able adequately to handle the present program.

Several months ago I appointed a faculty building committee composed of one representative from each of the schools and colleges on the campus and assigned to it the task of recommending an order of priority in the construction of new buildings. Acting solely on the basis of need, the committee reported that every school on the campus, with one exception, badly needed improved physical facilities and that in addition there was grave need of additional dormitories, new library facilities and an improved heating plant. While the facilities presently occupied by the School of Medicine are inadequate, the unanimous report of the committee placed certain other requirements ahead of the School of Medicine in order of priority of need.

Perhaps I have said enough to indicate the background of the physical plant against which we must consider the problem of an improved program for medical education. Now for the matter of staff.

For a period of approximately five years, the training of new college teachers was practically at a standstill. In the assignment of manpower during the war, possible needs for future teachers received little consideration. Furthermore, the war brought to many industries a more definite realization of the possibilities offered by scientific research, so industry stepped up its competition with the schools for the inadequate supply of manpower available at the end of the war. On top of that, the high level of economic activity in the post-war period has caused business and industry to take from the colleges and universities a large number of present and potential staff members who had training which would be useful to business. Faced with a very tight manpower situation, the universities then received a deluge of war veterans under the G. I. Bill of Rights. Enrollments increased enormously (doubled in our case) thus creating a demand for a substantial increase in the size of teaching staffs at a time when new staff members were as scarce as the proverbial hen's teeth, and industry was bidding for present staff members.

West Virginia University was handicapped in this situation by a salary scale which the Strayer Report stated would need to be increased by at least 25%, if the University was to be on the same basis as other institutions with which it would wish to be compared. It is no wonder that in the two-year period prior to the meeting of the legislature in January, 1947, the University lost more than 70 of its staff members to business or to other institutions. The 1947 Legislature appropriated more generously for the University, and thus made it possible to hold many staff members who might otherwise have been forced to leave because of the inadequacy of our salaries. It also enabled us to bring in a number of new teachers to help with the increased load. Unfortunately, the appropriations were not sufficient to enable us either to bring our salary range to a competitive level or to compete successfully for an adequate number of new teachers of the calibre which the University must have.

We are now in the process of making a survey of salary scales in a number of other state universities and land grant colleges located on all sides of us. Preliminary figures show that the median salary for a full professor at the University is approximately 20% lower than the median salary for the same rank in the other schools studied. In other words it will take a 25% increase to bring this median salary up to the average of the medians paid in the other institutions, and the increase must be greater if we want to be better than the average — and we do. If we had included private institutions in the study, the discrepancy would be still greater.

It should be clear that West Virginia cannot indefinitely maintain a rate of pay materially below that of other first-class institutions, and expect to compete on even terms with them for first-class men. Lest I be misunderstood, let me state that I have great respect for many members of the West Virginia University faculty as it is at the present time. That faculty has on it a much higher proportion of able men than could properly be expected in the light of the treatment which the University has received. I would pay tribute to those men whose devotion to the state and to the cause of education has kept them at

the University in the face of attractive offers to go elsewhere. Yet we all know what has happened to the cost of living; and University staff members have the same desire to provide a comfortable living for their families as have men in other professions and occupations. Even though we should keep all our best men because of their attachment to the institution, we still must compete on the open market for other men who have no such attachment; and I can tell you from recent experience that we are not being too successful in holding up our end of the competition in some areas.

This is the background against which I should like to discuss with you the problem of medical education in West Virginia, a background which shows clearly that inadequate financial support for the University over a long period of time has resulted in our having a physical plant which is grossly inadequate and a faculty from which we have lost many of our most capable men, and to which we cannot now attract a sufficient number of qualified instructors to meet our present load. There is no blinking the fact that the state must spend a very substantial amount of money to build the University into an institution of the first class in physical facilities and in faculty. Please keep that in mind as we proceed with a consideration of the problem of medical education in West Virginia.

Many of you took the first two years of your medical studies in the School of Medicine at the University and some of you finished at the Medical College of Virginia under the agreement which assures that two-thirds of the second-year class shall have a right to complete their studies at that institution. You know it from experience much better than I ever shall. You know something of its history, of the fact that at one time it accepted a much larger number of students than it does at the present time. You are also aware of the fact that accreditation was withdrawn from the school in 1934-1935, and was not restored until the enrollment was reduced to a size commensurate with the physical facilities. Whether the school remains a two-year school or becomes a four-year school, whether it continues to limit the entering class to thirty students or increases the size of that class, it must have better facilities in the next few years. The nature of the improved facilities will depend upon the ultimate plans of the state with reference to the training of its doctors.

A medical school is at the heart of a three-pronged enterprise. Primarily, it exists to train doctors, to pass on to the doctors of the future the knowledge and the techniques which have been developed up to the present. The second prong represents medical research without which it cannot long remain a first-class medical school. The third prong is a certain amount of medical practice in the final years of undergraduate instruction as well as in the graduate years. Medical students must have actual case material with which to deal. This means the facilities of a teaching hospital, which in its turn should be the center of the most enlightened medical practice in the state.

It should be obvious that a complete school of medicine of the first class will be an expensive institution; yet some months ago I received a communication from a physician within the state suggesting that the University should open a four-year medical school on the fees paid by the large number of veteran students in the University. Clearly, the writer, though a physician, had no adequate concept of the cost of medical education.

Let's look at each of the three prongs which I mentioned; first, as to medical education proper. One of the main reasons for the demand for an enlarged school of medicine at West Virginia University arises from the fact that many students who would like to study medicine are unable to obtain admission to any school of medicine. The situation has been aggravated by the great increase in the number of students attending the University. When the demand for training in engineering increased after the war, we added some new instructors, improved the lighting in the classrooms and laboratories and began giving courses in engineering from eight o'clock in the morning until eleven o'clock at night. As a consequence, we were able to accommodate a greater than 100% increase in enrollment in engineering. A corresponding increase in the demand for admission to the School of Medicine came squarely against the inflexible requirements for accreditation; and we shall admit in 1948 exactly thirty first-year students to the School of Medicine, as we did ten years earlier. Meantime, the number of applicants for those thirty places increased from about 45 to more than 175, and the latter figure could easily have been doubled if we had not limited the consideration of applications to those from bona fide residents of West Virginia. The number of applications for admission to the freshman medical classes over the country is on the order of twelve for each opening. This figure undoubtedly includes many duplicate applications; but it has been estimated that, excluding duplications, there are eight applicants for each opening. The youth of West

Virginia are no worse off in this respect than those of other states having one or more four-year medical schools.

Medical education is one of the most expensive of all types of professional education and few people would contend that a student should be admitted to a school of medicine simply because he applied. The controlling factor should be the number of doctors needed and the relationship of that number to the size of the school. If the School of Medicine at West Virginia University should be increased in size, the reason is not the increased number of applicants; it is that the people believe either that more West Virginia boys and girls should have a chance to become doctors or that the state needs more doctors.

Do we need more doctors? What kind of doctors do we need? Since we are thinking primarily in terms of a particular state, would either a four-year medical school or a larger two-year medical school insure more doctors for West Virginia?

At the outset we are confronted with the fact that there is no agreement as to whether more doctors are needed. From the standpoint of the man who is sick, there will never be enough doctors until he can get a doctor immediately when he needs one. On that basis, one-half of the population would be doctors and the other half would be working all the time to see that the doctors had enough money to live on. At the other extreme, some leaders, though not all, in the American Medical Association maintain that there are almost enough doctors and that the present facilities for medical education are adequate for the production of all the doctors we are likely to need. Whether the AMA has the wings of an angel, as it would modestly admit, or the cloven hoof of the devil, as some of its opponents would contend, it is a fact that to all intents and purposes it controls licensing to practice medicine and that any medical school which attempted to set up its own ground rules would find its graduates unable to obtain licenses. Accordingly, any institution which wishes to have a recognized school of medicine must operate within the conditions which govern the granting of recognition by the AMA, and it should have a full understanding of the conditions before it makes the first move.

Is our primary concern that of having enough doctors to meet the needs of West Virginia; or is it to offer training to West Virginians who want to study medicine, regardless of where they may decide to practice? What is the relation of the number of students in the medical school to the number of doctors in the state? Should the state turn out a number of doctors at least equal to the number needed for annual replacements? To what extent is the place of graduation from medical school a determining factor in where a doctor will locate? To what extent is place of birth a determining factor? If a state needs an average of fifty new doctors annually to maintain its supply of doctors on a replacement basis, will that be insured by graduating fifty doctors per year from a medical school in the state? Is the problem of providing better medical care for areas which may not be adequately served one of turning out more doctors or one of working out a better distribution of the existing supply of doctors?

A committee at the University consisting of Dean E. J. Van Liere, Dr. J. J. Lawless and Dr. Clark Sleeth has made a study of some facts concerning doctors in West Virginia. They have been good enough to let me have access to their data . The statements which I shall make with reference to doctors in West Virginia are the result of their researches. It is my hope that they will publish the information which they have obtained, as I believe it will be of great interest and benefit to the medical profession in the state and perhaps nationally. Their findings with respect to the distribution of doctors in West Virginia are quite revealing and demonstrate how easily one's views on the adequacy of the present number of doctors might depend upon the part of the state in which he lives. One county has one doctor for every 580 inhabitants, while another has only one doctor for 6500 inhabitants.

The validity of the exact figures obtained in the aforementioned research may be subject to some slight question in view of the lack of an annual registration of physicians in West Virginia. I am assured, however, that all sources of information have been exhausted by careful study and that any error in the survey is so small as to be unimportant as regards general trends.

As of January 1948 there were found to be 1825 physicians in practice in West Virginia, 69% in urban practice (i.e., in towns of 2500 or more inhabitants) and 31% in rural practice. Doctors 39 years of age or younger are distributed between urban and rural practice in about the same proportion as are all doctors. That is, about one-third are in rural communities. However, less than one-fourth (24%) of doctors between the ages of 40-59 are in rural areas, while nearly half (45%) of the doctors over 70 years of age are "country doctors". In fact, one rural physician in every four is over 70 years old. A careful analysis of the factors behind these figures would seem advisable.

It was felt that it would be interesting and important to try to determine where the physicians currently practicing in West Virginia originated, so an attempt was made to determine in which state each physician was born. Figures as to state of birth were available only for 1024 or 56% of the total number. Obviously any conclusions with respect to place of birth are subject to an indeterminate error due to our lack of information about the 44% whose place of birth is not given. West Virginia is the birth place of 587 or 57% of all those whose birth place is known. Approximately 71.5% of the West-Virginia-born doctors are in urban practice as against 69% of all West Virginia doctors. The only safe conclusion to be drawn appears to be that the behavior pattern of West-Virginia-born doctors with reference to settling in urban communities is about the same as those born outside of the state. There seems to be no significant difference on this point in terms of the ages of the reporting physicians.

No institution in the state gives a medical degree. However, there are 361 physicians in the state who attended the two-year School of Medicine at West Virginia University. This is about 20% of all the doctors in the state; but for the doctors of 39 years of age and under the percentage climbs to nearly 29. They are hardly distinguishable from the other doctors in the state in the distribution between urban and rural practice, although the West Virginia University alumni seem to have a slightly (but probably not significantly) greater preference for urban locations. This seems as true of the physicians under 39 as for their older colleagues.

How many young West Virginians enter upon the study of medicine each year? How many should be given the opportunity to do so? Figures compiled by Dean Van Liere for 14 years between 1930 and 1946 show that an average of 78 students each year enter some medical school from West Virginia colleges. As only 30 enter our own medical school, the remaining 48 are dependent upon other states to provide the beginning years of their medical education. In contrast, West Virginia University accepts no out-of-state students in its medical school. Obviously the state is dependent upon the indulgence of schools in other states for all the medical education of most of its youth who go into medicine and for some of the medical education of all of its medical students. In 1946 West Virginia stood 37th among the states in the number of students entering medical schools per million of population. New York, with 9 medical schools, stood seventh, while New Jersey, with no medical school, stood fifteenth. These figures deserve more study in detail in an effort to forecast the opportunities of West Virginia youth for a medical education if they continue dependent upon medical schools in other states.

Figures compiled by the State Health Department show that 837 physicians were licensed to practice in West Virginia during the 10-year period between 1938 and 1947, or an average of 84 per year. This is more than three times the number passing through our two-year school during the same period.

There are no medical schools in New Jersey, yet the American Medical Association reports no areas in that state requesting additional general practitioners. There are 9 medical schools in New York State, including some of the best in the world. Yet the temporary commission which recently made a report on the need for a state university in New York State found that New York uses about one-third more doctors than it educates and that it depends upon the facilities of other states for training a substantial portion of its medical students. In this respect at least, West Virginia seems to be following the lead of New York. If West Virginia trains more doctors, will it be training them for West Virginia or for New York? Shall we assume that training more doctors in West Virginia will provide more doctors for West Virginia; or shall we attempt to find out why doctors prefer to settle in certain communities and then try to set up those conditions in our West Virginia communities?

There is one factor which may become increasingly important in the near future, that of a regional approach to certain types of professional education. Unfortunately, the recent discussions of that approach by certain state governments have been complicated by the attempts of some states to avoid the effect of the decisions of the United States Supreme Court concerning equality of educational opportunity. The regional movement originated before the color question was introduced; undoubtedly it will produce suggestions in the field of medical education to which we must remain alert.

Now let's look for a few minutes at the second prong in our consideration of a medical school, the matter of medical research. The change in the pattern of our life over the past few decades has produced a substantial change in the medical problem. It is obvious that more and more we shall be concerned with the problems of older people. More and more the attention of the medical profession must be devoted to the condition

of men and women who are past the most productive period of their lives. Many of them will have accumulated a moderate amount of savings and they will be able to obtain a substantial amount of medical care by the use of their accumulated savings. At the bottom of the economic ladder, the combination of public concern with the problems of old age security and the conscience of the medical profession will provide medical care for those in limited economic circumstances. The combination of the two may well result in the employment of a disproportionate amount of the medical talent of the country in keeping alive and in moderate health a constantly increasing proportion of people who are not economically productive.

In this situation, is the wisest expenditure of funds that which will add a few more doctors to the total supply of doctors, or is it one which would make a more fundamental approach to the problem? If it had not been for the discovery of ways to prevent smallpox and typhoid fever, how many additional doctors would we need in this country to take care of the smallpox and typhoid fever cases which now never materialize? To borrow an analogy from a related field, it has been estimated that if all the dentists in the United States were assembled on the East Coast, and if each of them spent eight hours a day doing necessary dental work, moving westward as the job was completed in each community, it would take approximately 100 years to reach the West Coast. Recently, claims have been made for a method of treatment of children's teeth which would largely forestall the development of cavities. How many dentists would we need to educate to obtain an equivalent result in the form of treatment if the cavities were permitted to appear? The question which I am suggesting is the overall benefit to the state which would flow from the expenditure of a given sum of money in conventional medical education as compared with the benefits which might flow from a comparable expenditure for medical research or for public health in ways to cut down on the amount of suffering and the need for medical care. I recognize that a medical school can turn out a given number of doctors each year with clock-like regularity while research might continue for a decade or more without any tangible evidences of public benefit. Yet one success in the field of research or one big advance in the field of dissemination of existing knowledge might accomplish more to promote the health of West Virginia than all the doctors turned out in a decade.

Now a word about the clinical side of the medical school program. A four-year medical school needs good clinical facilities. It must have its own teaching hospital or at least control over an adequate number of teaching beds in one or more hospitals maintained in some other fashion. The teaching hospital associated with a medical school may well become the nucleus of a magnificent medical center with specialized units dealing with such matters as cancer, heart disease, infantile paralysis, and other diseases. These units are likely to be erected near the medical school by groups interested in the particular disease. The initial investment in the clinical facilities of the medical school would be large; yet it might well represent but a fraction of the total investment in medical and hospital facilities adjacent to the school. A well developed medical center could have a tremendous effect upon the general practice of medicine throughout the state. Such a program starting as the clinical side of a teaching program would inevitably involve such broader questions as local provisions for medical care and the policy of the state with respect to medical care for the aged and indigent. Before the first step is taken toward the four-year medical school, there should be a careful study of its relation to these other important matters.

The matter of the location of a four-year medical school becomes very important when it is viewed as the center of a model medical practice. If the medical school is to benefit most from its connection with the University, it should be located in Morgantown. Immediately the claim is made that Morgantown would not provide clinical material adequate in quantity and variety. Claims and counterclaims are made as to the effectiveness of medical schools in small towns. The policy of the state with respect to the possible development of regional health centers would be involved. There are those who would advocate having the first two years of the medical program in Morgantown and the clinical years elsewhere. The attitude of the AMA and the Association of American Medical Colleges on this point should be explored.

A new building is needed for the medical school whether we have a two-year or a four-year program; the location of that building will be influenced by the decision with respect to the course of medical education in the state. The cost of a building for a four-year school would be greater than that for a two-year school, but I think we might put down a figure of approximately $1,500,000 as the cost of a new medical school building.

I have referred to medical education as very expensive. Let's look at some figures. It is generally considered that a class of fifty represents an economic unit in medical education. A class of that size can make effective use of one group of teachers and laboratories. A smaller class is somewhat less efficient and a larger group would require an increase in teaching staff and in laboratory facilities. The operating cost of a four-year medical school having a class of fifty, that is, a total enrollment of 200, is generally stated as between $400,000 and $500,000 a year. At the present time, the legislative appropriation for general University activities is $2,700,000. Some of this money is expended for general purposes which are applicable to medical students as well as to others; for instance, expenditures for building operation and maintenance and for the library. Ignoring the portion of such expenditures which might properly be allocated to medical education, the current direct allocation of appropriated funds for the School of Medicine is $109,000. The additional teaching expenditure involved in the change to a four-year school having four classes of approximately fifty students each would be $300,000 at the least.

Then comes the matter of clinical facilities which are needed for a four-year school, but not for a two-year school. Experts in the field have stated that a first-class medical school should have ten teaching beds available for each student in either the third or fourth year class. To meet this requirement there would need to be ten teaching beds available for each of 50 students or a total of 500 teaching beds. Currently the cost of hospital construction is running about $15,000 per bed. Applying this to the 500 beds ideally required for our prospective four-year school, we have a hospital construction cost of $7,500,000. Some of these beds might come later from private sources in the form of hospitals for the treatment of cancer, heart disease, etc., which make a special appeal to the public; so we might assume that the initial call upon public funds would be for the construction of a hospital of about 350 beds at an approximate cost of about five and a quarter million dollars. To this would need to be added provision for living quarters for the resident medical staff and for nurses.

Obviously the beds must be filled if they are to serve their teaching role. Moreover, the patient who pays his hospital bills at full rate is often less willing to be used as clinical material than is the so-called house patient. Recognizing that hospital operating costs vary, it seems reasonable to assume a minimum daily cost per bed of $11.00 for a total of $3850 per day, or somewhat more than $1,400,000 per year for our 350-bed hospital. Much of this would be recovered from paying patients, but we cannot overlook the fact that the medical school authorities would find themselves under the necessity of meeting part of this cost as well as a substantial part of the cost of the out-patient department, say, a total of perhaps $400,000 per year. Money for the indigent cases — the basic teaching cases — would come from private sources (which your medical administrator would have to tap), from public assistance funds (with the imperative necessity of extremely close and harmonious relations with the public assistance department) or from appropriations for University activities (and perhaps at the expense of other University functions). The experience of other institutions has shown that *hospital* expenditures tend to be considered *medical school* expenditures and that medical school costs are sometimes met at the expense of the legitimate needs of the rest of the institution. The medical school with its teaching hospital resembles the proverbial camel with his nose under the tent.

I should now like to review these very rough figures:

1. For a medical school building, $1,500,000 regardless of whether we have a two or a four-year school.
2. For a four-year medical school, an additional $5,250,000 for a 350-bed hospital.
3. For a four-year medical school, an additional $250,000 for living quarters for nurses and resident medical staff.
4. For a four-year medical school, annual operating costs on the order of $300,000 more than a two-year school.
5. For a four-year school responsibility for hospital operating costs on the order of $1,400,000 annually, including the necessity of raising approximately $400,000 from public or private sources to meet deficits incurred in financing clinical teaching material.

The summary would look like this:

For a medical school building whether for a two or four-year program, $1,500,000 for construction costs.

For a four-year medical school, an additional $5,500,000 for construction and equipment; and an additional $700,000 *each year* for operating costs, plus responsibility for administering an additional $1,000,000 annually received from patients.

Where is this money coming from? Obviously it can't come from regular University appropriations, for the University has never succeeded in obtaining funds of that magnitude. As a matter of fact, for several years we have had 4 or 5 vacancies in the staff of our two-year school — vacancies which we could not fill at our present salary level. If we are to complete our present

medical school staff and increase it in size for a four-year school, we must have a material increase in medical school salaries. Yet our difficulties in recruiting a staff in medicine are less acute than in some other areas which are likewise important to the state.

Thus far I have not expressed my own opinion on the much discussed question of a four-year medical school. I have been trying almost from the time I arrived in the state to reach some conclusion on the point which I could recommend with confidence in its soundness. I regret to say that I have not seen a study of sufficient comprehensiveness and thoroughness to warrant such a conclusion nor have I been able to make one myself. Yet I can make certain statements with a considerable measure of assurance:

1. The state has not adequately supported the University. The result has not been to save money for the state; rather it has cost, and will continue to cost, the state dearly in the progress which it should have made but has not.

2. To attempt to create and operate a complete medical school without first strengthening those parts of the University already in existence would probably doom the rest of the University to increasing ineffectiveness for years to come. The less spectacular portions of the University program could not get adequate support in the face of the greater public appeal which the clinical aspects of a medical school would offer in its relief from pain and suffering. A balanced University program would be almost impossible and the best interests of the state would suffer.

3. A four-year medical school should not be undertaken unless the state is prepared to support it adequately. In view of the character of medical education the state would fall into serious error if it should treat a complete medical school on as penurious a basis as it has treated the University up to this time.

4. There is a growing feeling that young West Virginians who desire to study medicine or dentistry are not being given adequate opportunity to realize their proper ambitions. Only 30 can be accommodated in each of the first two years in medicine, none in the upper classes; and there is no provision for training dentists within the state. The young men and women of the state must go outside the state for their medical and dental training; and they may be subject to arbitrary exclusion because of their nonresidence in the state in which the schools are located. Some fear that the state may be endangering its own future health by a failure to make adequate provision for doctors and dentists.

These four statements I make in the profound conviction that they are true; and from them I draw the two following observations which I submit as worthy of the support of this body:

1. As a preliminary to a decision on the medical program, the Board of Public Works, the Legislature and the people of West Virginia should provide the University with substantial additional appropriations in an amount adequate to bring the University within a reasonable time to a position of parity with the best state universities in the country in salaries, in the relation of size of staff to size of student body, and in physical facilities.

2. Comprehensive studies should be started without delay to determine the future course of medical education in West Virginia with a view to drafting a program to be put into effect as soon as it will add to, rather than endanger, the overall University program. This study should be authorized by the Legislature and it should be made under the direction of a general committee upon which would be representatives of the Legislature, of the medical and dental professions, of hospitals, of public health and public assistance organizations, of the general public, and of the University. It should have an adequate staff and should take the time necessary to look into the present and future medical and health needs of the state and the best way to meet those needs.

The study should include the present and future needs of the state for doctors, dentists, and nurses; their distribution; possible sources of supply; the present and future demand of the youth of West Virginia for medical and dental education; trends in medicine and medical education, in dentistry and dental education, to insure that provision be made for future requirements rather than past needs; trends in the provisions for public health and public assistance; trends in the distribution and support of hospitals and specialized facilities; and trends in the practice of medicine. Other subjects would undoubtedly suggest themselves to the members of this Association and to the members of the committee if one is authorized.

In my opinion such a study can best be made by a committee created by the Legislature because it will cut across many lines and will transcend boundaries heretofore encompassing the University. If the study is not authorized by the next Legislature, however, it should be under-

taken by the University for its own protection, although this will be less satisfactory as the various agencies whose activities will be involved might well feel that the University would not give proper weight to their special problems.

We are considering a subject which involves very large sums of money; more important, it also involves a pattern of health for the people of West Virginia for years to come. Wise planning now will pay large dividends in the future in improved health and in money saved. Mistakes now could be expensive in money and in lost opportunity for improved health.

West Virginia University is ready for its share of the undertaking.

LEAD ABSORPTION AND POISONING

In many industrial occupations workers frequently come in contact with lead or lead paints, which may be inhaled, ingested, or absorbed through the skin.

The Navy maintains a large number of shore establishments where this hazard is frequently encountered. Medical department personnel are called upon to perform certain types of periodic examinations in the industrial health program.

One of the procedures used extensively in the clinical aspects of this sort of work is the so-called Basophillic Aggregation Test. It involves the same principle of the old stippled cell count.

To a large extent it is a screening test—not a specific test for lead poisoning as many people think.

Its widest use is for screening all painters who come in contact with lead paints; welders who may be using rods or material containing small amounts of lead; and all other workmen whose occupations bring them in contact with lead or lead products.

A count in excess of 1.5 per cent should be sufficient basis to recall an employee for a further and more complete clinical and laboratory examination.—Hospital Corps Quarterly.

LOBOTOMY

Surgical operation for the relief of mental symptoms has been practiced since ancient times. Even today the removal of the uterus and ovaries, or of the thyroid, is too often done for the relief of "nervousness." The operation of frontal lobotomy or leukotomy is, however, a more direct approach to the problem of amelioration of the symptoms of mental disease, and it is advocated with the neurophysiological rationalization that isolation of the prefrontal cortex by cutting the fiber connections between the thalamus and prefrontal cortex will cause psychopathologic ideas and feelings to lose their emotional potency and that in time these may even disappear.

The procedure is still in a stage of development at which it should be considered only for those patients who are believed to be chronically ill, who have not responded to other appropriate forms of therapy and who are not likely to recover in the future.—California Medicine.

DIET AND INSULIN IN SOME DIABETIC COMPLICATIONS*

By GEORGE P. HEFFNER, M. D.,
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In most cases of diabetes complications will develop sooner or later. Therefore, the physician must understand not only the treatment of uncomplicated diabetes but must be prepared to guide the patient as safely as possible through periods in which his daily mode of life and his metabolism are disturbed. By anticipating these metabolic changes the doctor can prevent undue risk to his diabetic patient.

Duncan[1] lists the complications of diabetes in order of their frequency as follows: (1) acute infections, (2) degenerative disorders, (3) surgical conditions, (4) metabolic disorders (notably obesity and ketosis), and (5) pregnancy.

A survey of 250 case records of diabetic patients admitted to the Charleston General Hospital in 1946-1947 (table I) indicates that infections, both acute and chronic, accounted for 29.6 per cent, surgical operations 10.8 per cent, and pregnancy only 2 per cent. Of the 250 cases only 61 were uncomplicated; in the complicated group there were 11 deaths, a mortality rate of 4.4 per cent for the entire group, or a rate of 5.8 per cent for the complicated group. These mortality rates are not especially good. You will note, however, that the mortality rate for surgical operations was 7.4 per cent which compares favorably with that reported by Root[2] in 1940, namely, 7.9 per cent in a series of 2,941 operations. A more recent series from the New England Deaconess Hospital[10] lists 1,736 surgical operations between 1942-1947 with a mortality rate of 2.7 per cent. The miscellaneous group of the series from the Charleston General Hospital includes arthritis, carcinoma, diarrhea, fibroid uterus, herpes zoster, nephritis, peptic ulcer, pernicious anemia, ureteral calculus, ulcerative colitis, various allergic conditions (asthma, urticaria, eczema), billiary cirrhosis and others. Some diabetic patients had two diagnoses on admission and hence were classified in two categories, making the total of admissions listed slightly more than the 250 patients numbered in the group. In considering some of the more common complications of diabetes it must be remembered that each diabetic patient presents an individual problem and as such must be treated, but certain generalizations are necessary.

Perhaps the two simplest complications seen in office practice are extraction of teeth and the

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common cold. Here the diabetic who has been adequately controlled on a general diabetic diet may suddenly find himself confronted with the fact that he cannot eat solid foods. The patient himself usually is at a loss to know how to figure a liquid diet of the same carbohydrate, protein and fat values as previously taken.

TABLE I

Total Admissions Studied	250
Uncomplicated	61
Complicated	190
Deaths	11
Mortality Percentage	4.4%

Complications	*Admissions*	*Deaths*	*Per Cent*
Acute Infections	54	1	1.8
Miscellaneous Types	25	0	0
Carbuncle	5	0	0
Gangrene	12	1	8.3
Pneumonia	12	0	0
Chronic Infections	20	0	0
Miscellaneous Types	12	0	0
Pyelonephritis	6	0	0
Tuberculosis	2	0	0
Degenerative Diseases	65	3	4.6
Arteriosclerosis	31	—	—
Hypertension	28	—	—
Cerebrovascular Accident	6	3	50
Surgical Operations Performed	27	2	7.4
Intestinal Obstructions	3	1	33.3
Injuries (not including fractures)	5	1	20
Fractures	5	0	0
Pregnancy	5	1	20
Cataracts, Diabetic	3	0	0
Coronary Thrombosis	4	1	20
Leukemia, Acute	1	1	100
Diabetic Retinitis	1	0	0
Diabetic (?) Cord Bladder	2	0	0
Peripheral Neuritis	6	0	0
Epilepsy	2	1	50
Chronic Nephritis	3	1	33.3
Miscellaneous	52	0	0

Survey of 250 patients admitted to the Charleston General Hospital in 1946-1947. (Some patients had two diagnoses, making the list of classified admissions slightly greater than 250.)

Table II shows how a liquid diet might be determined for a 75 kilogram (165 lb.) patient allowing 30 calories per kilogram. In our clinic we lean toward undernutrition allowing 30 calories per kilogram for average sedentary work. Joslin[3] cites the work of Miss Vance and Miss Hunt who estimated the normal caloric intake of nine dietitians at the New England Deaconess Hospital and found it to average 30 calories per kilogram. The basic caloric level was 24.6 calories per kilogram. Thus for a 75 kilogram patient the caloric value of the diet would be 2,250. The protein value might be 100 Gm. as shown (1¼ Gm. per Kg. body weight). The average American diet contains more than 1 Gm. of protein per kilogram of body weight. The patient is more satisfied if he receives 1¼ to 1½ Gm. of protein per kilogram and since the discovery of insulin the specific dynamic effect of protein in increasing the metabolism or the presence of ketogenic amino acids in the proteins need not be considered as they had to be during the "Allen era".

Allowing 4 calories per Gm. of protein, the total calories supplied by the 100 Gm. of protein in the calculated liquid diet is 400. This leaves 1,850 calories to be supplied by the carbohydrates and fat. This is divided equally between the two, thus 925 calories are to be supplied by the carbohydrates and 925 by the fat. Since carbohydrate gives 4 calories per Gm. the diet would contain 231 Gm. of carbohydrate. Fat supplies 9 calories per Gm., hence, 103 Gm. of fat would be required. This gives a total diabetic diet of C—231 Gm., P—100 Gm., and F—103 Gm. These values can be computed in terms of liquid food for twenty-four hours as shown, and then divided fairly equally into four feedings. If the patient must follow such a diet for several days the monotony can be relieved by substituting ginger ale, egg white, puree of vegetables, other fruit juices or soft drinks such as coca cola. The composition of these foods can be determined from the table of nutritive and caloric value of foods as listed in any *dietetic* book, e.g., Bridges,[13] or any book on diabetes. Such a liquid diet obviously can be used also in hospitalized patients with acute infections, hemiplegias or it can be given postoperatively. In the case of dental extraction no change in the insulin need be made unless there is an acute infection or diminished sensitivity to insulin in which case the insulin dose can be regulated by means of the amount of glycosuria before each feeding. Figure I gives a diagrammatic representation of how we gauge insulin dosage to be given in addition to the usual morning dose. Using the scale on the bottom half of the figure for mild complications (such as dental extractions) it can be seen that if the 11 a. m. urine sugar is yellow, 10 units of crystalline insulin are given before the noon feeding, if red, 20 units are given, et cetera. If the patient has a moderate infection and seems to be somewhat more insulin-insensitive the scale as shown in the upper half of the figure is used, thereby increasing the dosage of insulin somewhat. Obviously, these figures for insulin dosage are modified by changes in the blood sugar.

TABLE II

Include for Twenty-Four Hours

Whole Milk — 7 Cups
Eggs — 4
Dextrose — 2 Tsp. (or Cane Sugar — 1½ Tsp.)
Cream Soup — 2 Cups
5% Fruit Juice — e.g., Tomato or Grapefruit — 1 Cup
10% Fruit Juice — e.g., Orange Juice — 2 Cups
Cooked Cereal—e.g., Cream of Wheat or Farina—1½ Cups

Breakfast

1 Glass Milk
Egg Nog — 1 Egg
½ Tsp. Dextrose
Milk—1 Cup
Cream of Wheat—½ Cup
10% Friut Juice—1 Cup

Lunch

1 Glass Milk
Egg Nog — 1 Egg
½ Tsp. Dextrose
Milk—1 Cup
Farina—½ Cup
5% Fruit Juice—½ Cup
Cream of Tomato Soup—½ Cup

Dinner

1 Glass Milk
Egg Nog — 1 Egg
½ Tsp. Dextrose
Milk—1 Cup
Oatmeal—½ Cup
10% Fruit Juice—1 Cup
Cream of Mushroom Soup—½ Cup

Bedtime

1 Glass Milk
Egg Nog — 1 Egg
½ Tsp. Dextrose
Cream of Celery Soup—1 Cup
5% Fruit Juice—½ Cup

Liquid Diet for 165 lb. (75 Kg.) Patient—
30 Cals./Kg. = 2,250 Cals.
C — 231 P — 100 F — 103

The patient with a severe infection and hyperpyrexia presents more of a problem. For instance, in a patient with cellulitis of the leg and a temperature which rises to 104 degrees marked insulin insensitivity almost certainly will develop due either to the proteolytic effect of the increased number of leukocytes on the insulin, the development of acidosis, the inhibition of the insulin effect on the end organs or any of the other causes mentioned by various authors. Insulin insensitivity in moderately severe diabetes produces a very unstable diabetic picture which may easily and quickly develop into acidosis and coma if not carefully watched. This type of patient often has no desire for solid food and must be kept on a liquid diet as previously outlined.

FIGURE I

Regimen for Insulin Dosage According to Glycosuria in Fractional Urines in Acute Diabetic Complications*

Urine Test	*Yellow Green*	*Yellow*	*Orange*	*Red*
Insulin Dose	8	14	20	25

Regimen as Used in Mild or Chronic Complications or in Uncomplicated Diabetes

Urine Test	*Green*	*Yellow*	*Orange*	*Red*
Insulin Dose	5	10	15	20

*These doses are modified by blood sugar determinations.

Here a word of caution might be in order. We do not try to reduce hyperglycemia too rapidly, especially in older diabetics, because of the danger of producing myocardial insufficiency by a sudden change in blood sugar level. It is probably safer to allow the patient to spill a slight amount of sugar in his urine during the acute phase of the infection and gradually bring his blood sugar to normal levels as the infection subsides.

The diet should contain slightly more protein and carbohydrate than normally to cover the needs of the increased catabolism. In the more severe cases we use a modification of Duncan's[1] method of feeding the patient equal portions of food at 4 or 6 hour intervals, giving a dose of insulin before each feeding sufficient to keep the urine almost sugar free. Thus a diet of carbohydrate 200-250 Gm. and protein 100-120 Gm., with sufficient fat to bring the total calories to 30 calories per kilogram of actual body weight is used. This is divided into 4 equal portions and given at 6 hour intervals, each feeding preceded by regular insulin the dose of which is determined by the method shown in figure I. Also, each morning a small "buffer" dose of protamine zinc insulin is given, the dosage being determined according to the blood sugar but usually ranging from 15 to 30 units. Many leading internists do not use protamine insulin during acute complications but we have found that it tends to keep the blood sugar curve smoother if used as outlined, together with equably spaced feedings which are preceded by regular insulin. The one death in our 54 acute infections occurred in a patient who had gangrene with infection and diabetic acidosis. The diabetes of all the others was fairly easily controlled by the foregoing regimen.

In the series of 250 cases there were 65 patients with degenerative diseases among which there were 3 deaths, a mortality rate of 4.6 per cent. The 3 deaths occurred in patients who had cerebrovascular accidents. Insulin resistance developed in one patient on his 8th hospital day resulting fatally two and one-half days later. The patient's insulin dosage during his last 22 hours was 3,200 units and his blood sugar fluctuated between 470 and 990 during this time. It will be noted that coronary thrombosis is listed separately. This should be classified with the degenerative diseases. There was one death among four patients with coronary thrombosis. In the latter condition it is particularly important to avoid dropping the blood sugar too fast or to too low a level due to the deleterious effect of hypoglycemia on the myocardium. It usually is safer to keep the fasting blood sugar between 130-150 milligrams per hundred cubic centimeters and allow glycosuria (one plus) in the fractional urines.

Very often a patient with hemiplegia is unable to swallow. In such cases tube feeding may be resorted to, using a liquid diet as previously shown. In many instances in these complications as well as in acute infections and surgical operations, parenteral feeding alone must be resorted to and the nutritional requirements of the patient must be supplied entirely by intravenous feeding. Here the knowledge of the requirements of normal metabolism is essential. Table III shows the requirements for a patient receiving intravenous feeding during a complication. The fluid requirement of 3,000 cubic centimeters is well known to all. However, the protein and glucose requirements are not too well appreciated. Finally, the salt requirement for twenty-four hours is, under ordinary circumstances, not more than 10 Gm. One infusion of 1,000 cubic centimeters of normal saline will supply 8 Gm. of salt; and if saline is used with each infusion, tissue edema is prone to develop due to excess of sodium. Thus, we give three infusions of 1,000 cubic centimeters each, spaced eight hours apart and administered at the rate of 8 cubic centimeters (120 drops) per minute. One infusion will contain 100 Gm. of glucose (10 per cent solution) in saline with 35-50 units of crystalline insulin contained in the infusion. Wilder[4] has advocated this method of giving insulin to surgical patients but gives only one unit of insulin for each Gm. of glucose in the infusion. Root[5] stated that in a few diabetic patients studied at the New England Deaconess Hospital the intravenous administration of 50 Gm. of glucose in saline was not accompanied by a loss of glucose in the urine. Sprague[6] reported experiments on normal men having a normal ability to store and oxidize carbohydrate. He found that they could receive dextrose intravenously at the rate of 0.85 Gm. per kilogram per hour without excreting abnormal amounts in the urine. Thus a 60 kilogram man should take 51 Gm. of glucose per hour intravenously without showing glycosuria. Wilder,[4] however, notes that dextrose given parenterally to the diabetic escapes the glycogen barrier of the liver and is in part excreted in the urine. The latter observation has been ours also and we believe that some of the insulin contained in the intravenous solution is also excreted into the urine and not utilized. The rapidity of the utilization of insulin is thereby governed by the rate of administration of the glucose, and the insulin effect upon the metabolism of the latter is better coordinated. The question might arise, why use 35-50 units of insulin in 1,000 cubic centimeters of 10 per cent (100 Gm.) glucose? Joslin[9] states, "In general one unit of insulin will metabolize one or two Gm. of carbohydrate and perhaps even three to six Gm." To quote Joslin again, "The crippling effect of infections upon the power of insulin is well known." For this reason we use the larger amounts of insulin, as high as 50 units (or 1 unit for every 2 Gm. glucose in the solution), in the poorly controlled or insulin insensitive diabetic. If judgment is used in determining which patient is to receive the larger and which the smaller dose no hypoglycemic reactions will occur. Finally, in our solution we use amino acids equivalent to 33 Gm. of protein if this amount can be given without reaction. The latter is often impossible and the amino acid dosage is then decreased to the limit of tolerance. The other two infusions contain 5 per cent glucose in distilled water plus 20-25 units of insulin and amino acids in the same dose as just outlined. Also, remembering that vitamin B is apparently essential for the metabolism of carbohydrates and that this method of feeding supplies no vitamins, both vitamin B and C are given either in the infusion or by a separate injection subcutaneously in rather large doses.

TABLE III

Nutritional Requirements for Patient Receiving Intravenous Feeding

Water	3000 cc.
Protein Hydrolysate (Protein equivalent of)	100 Gm.
Glucose	200 Gm.
Salt	10 Gm.

Give in three infusions of 1,000 cc. each to be administered at the rate of 8 cc. (120 drops) per min.

One infusion to contain 10% glucose in saline plus 33 Gm. protein equivalent of protein hydrolysate and 50 units of crystalline insulin.

Two infusions to contain 5% glucose in distilled water plus 33 Gm. protein hydrolysate and 25 units of crystalline insulin each.

The insulin given to the patient fed parenterally is usually crystalline. Since glucose from the infusion often is spilled over into the urine, fractional urinalyses for glucose are useless. However, the blood sugar six hours after an infusion should give a fairly good idea of the insulin requirement, and, if needed, one dose of protamine zinc insulin is given at the same hour each day.

With the foregoing facts in mind the management of the surgical diabetic becomes almost routine. Several points demand emphasis, however. In elective surgery the diabetes should be completely regulated before operation and the glycogen stores of the body maintained at a maximum by use of a fairly high carbohydrate diet with adequate insulin to cover the intake. Since the patient receives no food after mid-

night preceding the operation, no insulin is given that morning except a small "buffer" dose of protamine insulin if desired. This "buffer" dose is used to help stabilize the blood sugar after surgery. The dose is about one-third to one-half of the usual dose of protamine insulin ordinarily given. If there is any possibility of hypoglycemia occurring during the operation from the previous day's insulin, we give 1,000 cubic centimeters of 5 per cent glucose intravenously about one hour before the operation is scheduled. We do not cover this glucose with any insulin. A transient, high blood sugar from the infusion will do no harm while a hypoglycemic reaction unnoticed during a general anesthetic might be fatal. This latter precaution is seldom necessary, however. It is well to remember also that anesthesia, particularly ether, not only causes a rise in blood sugar but shortens the time of action of regular insulin so that the intervals between injections often must be shortened. Due to the postoperative nausea following ether anesthesia, very often it is wise to feed the patient intravenously as outlined, with certain modifications. The amino acids are not needed since the patient probably will be taking oral feedings again twenty-four hours postoperatively. Also, the insulin dose in the infusions need not be so high since the patient is not insulin insensitive (following elective surgery) and since a "buffer" dose of protamine insulin was given before or immediately after surgery. Ten to fifteen units are adequate usually in a 1,000 cubic centimeter infusion of 5 per cent (50 Gm.) glucose. The day following surgery the patient usually can be placed upon a diet of surgical liquids with the carbohydrate value equal to the carbohydrate equivalent of the diet upon which he is to be ultimately standardized. This diet is made up of fruit juices, ginger ale, dextrose and egg white or, if permitted by the surgeon, a liquid diet containing milk and gruels as previously outlined. At this time the daily morning injection of insulin can be resumed either as two separate injections, one of protamine insulin and one of regular insulin according to the requirements as determined from the blood sugar and fractional urinalyses, or as one injection of mixed insulin. We have been using mixed insulin for four years with considerable success in many patients.

Figure II, which is charted from one of Colwell's[11] cases, merely shows the different time-activity curves of the various mixtures over a twenty-four hour period. The upper curve shows the blood sugar drop over a twenty-four hour period with protamine zinc insulin alone. The next curve below shows the effect of a mixture of equal parts of regular and protamine insulin. Then the effect of a 2:1 mixture is shown by the next curve, i.e., two parts of regular and one part of protamine, then a 3:1 mixture, and finally regular insulin alone.

Ulrich[8] found that when the patient ate his meals at the usual times and when the blood sugars were taken at more frequent intervals the blood sugar curves were not the smooth

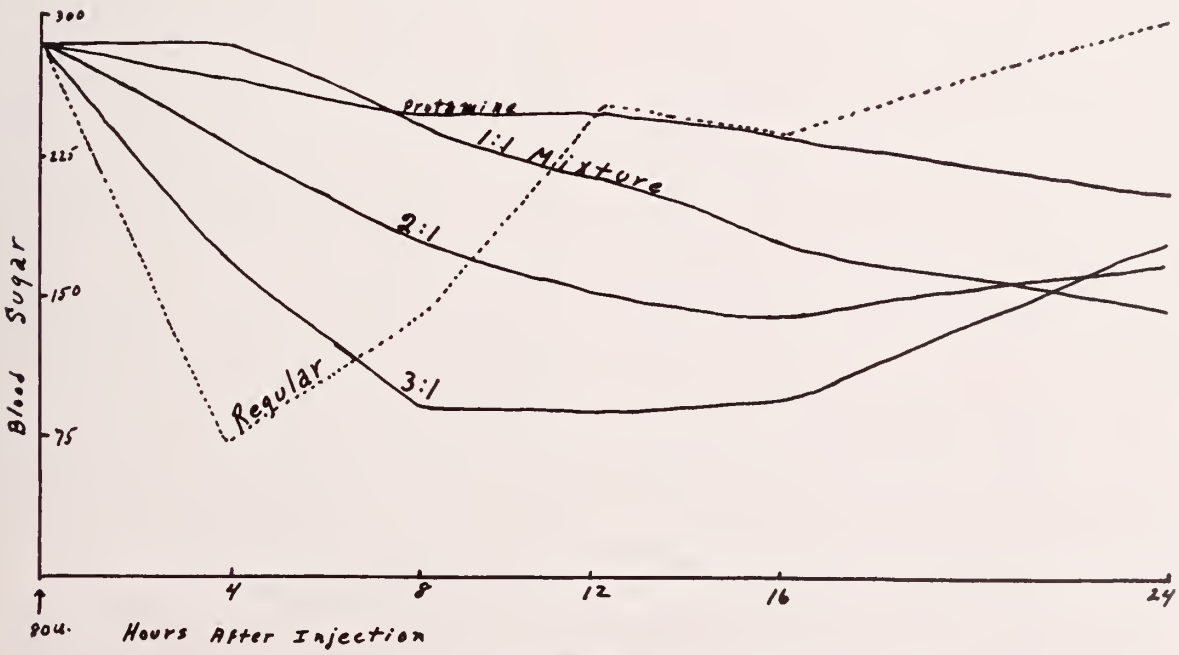

FIGURE II
Time—Activity Curves of Various Insulin Mixtures and of Regular Insulin
(Charted from one of Colwell's cases)

lines as shown previously but showed postprandial rises. The general contour of the curve, however, was the same. As stated previously, we have found insulin mixtures quite satisfactory in regulating many of our convalescent cases and the idea of getting one injection daily instead of two is appealing to the patient who must anticipate a lifetime of daily "shots".

In emergency surgery the operation must be performed at once and the diabetes treated later. Here all the foregoing principles outlined under infections may be necessary. Sudden restriction of carbohydrate may be dangerous, especially in older patients, and should be avoided. Insulin often must be given in more frequent injections but in smaller doses. Acidosis, if present, must be vigorously treated during and after the operation by the methods just outlined.

Little mention need be made here of diet and insulin in chronic infections, e.g., tuberculosis and chronic pyelonephritis, but suffice it to say that the diet should be fairly high in calories and the insulin dose regulated much the same as one would regulate it in an uncomplicated case of diabetes.

While insulin insensitivity of a moderate degree may develop during pregnancy thus requiring a larger insulin dosage, more frequently there will be no insensitivity and the fetal pancreas will supply the mother with insulin so that the insulin requirement of the patient is markedly diminished. This diminished insulin requirement may persist for several weeks after delivery.

White[7] gives the last dose of insulin twenty-four hours before delivery and glucose is administered to the mother preoperatively or during delivery. It is then usually not necessary to give the infant glucose to prevent a serious hypoglycemic reaction in the child. The insulin dose during the pregnancy is regulated by the height of the blood sugar. If insulin is given according to the glycosuria in the fractional urinalyses, care must be taken in increasing the dose, for in pregnancy the renal threshold is low and glycosuria may be present when the blood sugar is relatively low.

The diet during pregnancy must be generally increased. Thirty to forty calories per kilogram are given and the carbohydrate intake is liberal, being 200-300 Gm. daily. The protein intake must be 2 Gm. per kilogram to supply protein to the fetus and keep a positive nitrogen balance. Sodium chloride should be restricted especially during the third trimester to help prevent the accident of eclampsia so frequently seen in diabetic women. Finally, vitamins must be administered in liberal quantities throughout the pregnancy.

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SURGERY IN THE AGED

Operative surgery in patients beyond the age of seventy has been demonstrated in the experience of recent years to be relatively safe. The yearly increase in the elderly population in this country indicates that we may expect a larger requirement for surgery among the aged as time goes on. The recognized higher surgical mortality rates in these patients are constantly decreasing, and, at the same time, more extensive and formidable procedures are being successfully applied.

Diseases of the heart and blood vessels represent the principal causes of death among patients who succumb during the postoperative period for reasons not directly related to the operative work. Our efforts must be directed toward making surgery even safer for these patients by concentrating on increasing our accuracy in the application of the details of surgical care so that mortality rates reach the irreducible minimum possible with present knowledge.—C. Stuart Welch, M. D., in New England J. of Med.

RESPIRATORY INFECTIONS IN INDUSTRY

The time-honored advice given to a patient with an acute respiratory infection to "go to bed for twenty-four or forty-eight hours" is undoubtedly of merit. In the absence of fever it is questionable whether or not such a procedure shortens the duration of the infection, but it serves to isolate the patient and thus to prevent spread by contact. Isolation, or two days at home in bed as a mandatory procedure, although ideal from a control point of view, is not always practical in industry. In the absence of profuse nasal secretion, cough or fever, it is probably unnecessary.

The observance of general hygienic measures, such as the use of disposable tissues for coughing, sneezing and nose blowing, and cleanliness of the hands, requires no comment.—Geo. F. Wilkins, M. D., in New England Journal of Medicine.

INTERVERTEBRAL DISC LESIONS*

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In this paper, it is proposed to consider protrusions of the intervertebral discs that produce disability requiring surgical relief. A multitde of names, some of which have been purely descriptive, has been given to the microscopic structure of the removed disc elements. The nomenclature most commonly employed today embraces the terms "herniation", "rupture" or "prolapse" of the disc and its capsule or of its contained nucleus. The two chief areas of the spine in which these lesions are located are (a) the lumbosacral region and (b) cervical or cervicothoracic region. Each lesion will be considered separately. Thoracic protruded discs are virtually unknown, clinically.

LUMBAR OR LUMBOSACRAL PROTRUDED DISCS

History and Subjective Symptoms.—It was not until 1934, when Mixter and Barr[1] first accurately described the syndrome, that the lesion was recognized as the chief cause of low backache and unilateral sciatica. Before that date, extradural cartilaginous masses had, of course, been removed surgically but usually only when a subarachnoid block had developed and they were designated at that time as extradural chrondromas without its being appreciated that they were misplacements of a normal structure, rather than true neoplasms. The patient may or may not have had a direct injury to the lower spine. More often it is an indirect twisting or wrenching type of injury that initiates the pain. Occasionally there is no definite traumatic episode but often such patients are farmers, carpenters, and the like, who engage daily in heavy physical work. Usually, but not always, there is a variable period of low backache before the peripheral sciatic pain develops. A few patients never have any appreciable low backache. If the protruded disc is at the usual fourth or fifth lumbar interspace, the sciatic pain is characteristic. It begins in the hip posteriorly, extends to the posterior thigh, the popliteal space, the calf, ankle and lateral or medial aspect of the foot and toes. Coughing and sneezing typically exaggerate the pain, as do standing and walking, in contrast to lying in bed. If the pain is more severe or as severe while lying down, arthritis or cord tumor should be thought of, rather than a protruded disc. The pain often is described as throbbing and aching, like a toothache, and is characteristically worse at the end of the day after the patient has been ambulatory for many hours. At times, the pain is bilateral in which case a central midline protruded disc must be thought of. If the pain is in the anterior portion of the thigh, a second or third lumbar interspace disc should be considered. Typically, the pain fluctuates a great deal in the early weeks and months after its onset and often is relieved for rather long periods of time by the wearing of a firm lumbosacral belt, sleeping with a fracture board beneath the mattress, avoiding lifting, straining and stooping, and by the application of diathermy to the lower back and affected leg, or by leg traction for a few days. Twenty to thirty pounds in weight may be lost because of the pain and consequent loss of appetite. Eventually, the patient seeks surgical relief, as he has become practically, if not entirely, disabled or even bedfast. We have seen only one case of protruded disc incident to an adjacent fracture of the vertebra, discovered at postmortem examination, death having been caused by other injuries.

Positive Neurologic Findings.—Watching the patient walk about the examining room is a valuable diagnostic test; he often "favors" the affected leg. Brisk and normal walking is relative evidence against a surgically important disc being present. Inspection of the unclothed back in the erect position should give valuable evidence: in cases in which there is an unquestionable protruded disc, the normal lordotic curve of the spine is largely or entirely obliterated; the lower spine is straight and the pelvis usually lists away from the painful side, thus elevating the hip. The jugular compression test is done with the patient in the erect position and may induce pain extending into the calf, ankle and foot.

With the patient in the supine position on the examining table, the Lasegue's maneuver and straight leg raising tests are carried out. Typically, these greatly exaggerate the pain in the lower back, hip, posterior thigh or popliteal space on the affected side. Patrick's test should be done. Forward neck-flexion with cough may aggravate the pain. The reflexes in each leg are then carefully compared; on the painful side the ankle jerk may be absent or diminished in a fourth or fifth lumbar interspace disc but can be entirely normal with a fourth interspace lesion. If the knee jerk on the painful side is less active than on the normal side and the patient has definite anterior thigh pain, the presence of a second or third lumbar interspace protruded disc is almost certain. The ankle jerks should always be checked with the patient in the prone position and the feet elevated to 90 degrees or leaning on

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**From the Department of Neurological Surgery, Medical College of Virginia, Richmond.

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the back of a chair with the feet extending horizontally in back. Sensory tests constitute the most difficult part of the examination, since they require the intelligent and close cooperation of the patient; sensation of the lateral portion of the foot and ankle of one side is compared with the same dermatome of the other foot, et cetera, a rather light pin scratch being best. Hypesthesia of the lateral aspect of the foot, ankle and calf is the rule in the fifth lumbar interspace lesions and of the medial aspect of the foot, ankle and calf in fourth interspace lesions. Occasionally there is marked atrophy of the calf, fibrillation of lower leg muscles and weakness of dorsiflexion of the foot but not as frequently today in earlier cases as was the case a decade or more ago. There are no pathologic reflexes (i.e., clonus or Babinski). With the patient in the prone position, it often is found that the course of the sciatic nerve in the affected hip and leg, including the calf muscles, is very tender to moderate palpation. Characteristically, the fourth and/or fifth interspaces of the lumbar spine are very tender to deep thumb pressure, often with radiation to the ankle and toes. Percussion of the interspaces with the examiner's fist or a reflex hammer may bring out the pain better than thumb palpation.

Diagnosis and Differential Diagnosis, X-ray Examination, Question of Lumbar Puncture or Pantopaque Study.—If all or most of the aforementioned symptoms are present, the diagnosis of a protruded lumbar disc is unequivocally established. If the history and findings are borderline in type, conservative therapy is best for the time being. The differential diagnosis includes cord or cauda equina tumor, spondylitis, spondylolisthesis, metastatic bone disease, or other bony and congenital vertebral lesions. X-ray films, anterior, posterior and lateral, of the lumbosacral spine are essential and should never be omitted. We have seen a metastatic carcinoma of the breast cause unilateral sciatica clinically undistinguishable from that produced by a protruded lumbar disc but the x-ray films showed metastatic spinal involvement. If spondylolisthesis, spina bifida occulta, severe localized arthritis, or lateral lumbar scoliosis of the spine is present, an orthopedist should review the case with particular reference to the necessity of fusion at the time of the disc exploration. In some clinics, a lumbar puncture is done in every case of unilateral or bilateral sciatica; if the protein is elevated above 60 mg. per hundred cubic centimeters, an airogram or oil study of the subarachnoid space is done. In our clinic, we rarely do a lumbar puncture in the typical case of unilateral sciatica today, but always do so, usually with pantopaque study, in every case of bilateral sciatic pain or in cases with a borderline syndrome. We have recently operated on a female patient in the latter category. She had fallen from a bicycle and bilateral sciatic pain developed, extending to the ankles to the extent that she was completely bedfast for six weeks before admission. A lumbar puncture at the fourth interspace showed no subarachnoid block but the spinal fluid protein was 80 mg. per hundred cubic centimeters and a pantopaque study revealed a defect at the third lumbar interspace. At operation (bilateral laminectomy with opening of the dura), six tumors of the cauda equina were found (neurosarcoma) and, of course, the fall from the bicycle had nothing to do with the development of the tumors except possibly to precipitate the symptoms caused by them.

We use pantopaque fairly often today, especially in borderline disc cases in which the symptoms or objective findings are not typical, or if a tumor is suspected. The pantopaque usually can be entirely removed at the time the study is done and if not, the few remaining droplets are spontaneously absorbed in a few months, leaving no foreign material in the subarachnoid space, as formerly was the case with the use of lipiodol, especially if operation was not performed. Our residents have become quite skillful in making this test and almost invariably carry it out in appropriate cases.

Operation (Occasionally a Complete Laminectomy), Question of Fusion.—In the average case we invariably use spinal anesthesia with rather heavy preliminary sedation with morphine, hyoscine and nembutal. This is an ideal anesthetic in younger patients. If the patient has hypertension or is over 55 years of age, we usually use ether vapor.

A hemilaminectomy usually is done in the ordinary case of unilateral sciatica with removal of only a small amount of bone on the affected side, as first developed by Love.[2] This does not weaken the spinal (bony) architecture. We routinely inspect the fourth and fifth lumbar interspaces in every case and the third as well, if there is anterior thigh pain and a diminished knee jerk on the painful side. The muscles on the nonpainful side are not freed from the spinous processes. The appropriate ligamenta flava are reflected laterally or resected and the disc removed extradurally. We rather lightly curet the interspace, not going too far anteriorly, as tragic cases have been reported (during the war) of trauma to the aorta or inferior vena cava, which structures are adjacent to the lower lumbar interspaces. Gel-foam is of great aid in controlling

extradural venous bleeding. A fusion is done in about 15 per cent of our cases today, chiefly when the aforementioned orthopedic lesions are present. A marked spondylolisthesis can cause a typical and severe unilateral sciatica in the absence of a protruded disc. Such a case should be fused by the orthopedist at the time of the disc exploration, and a plaster jacket applied. We insert no bony plug in the interspace from which the disc was removed, as is done in some clinics. In recurrent cases, a few of the sensory root fibers of the affected root may be severed extradurally and a fusion should probably be carried out; we have seen two cases during the past three years with two recurrences, i.e., three operations in each case were required for recurrent discs. Today we would fuse such recurrent cases at the time of operation for the first recurrence. After the usual operation without fusion, the patient is kept in bed for two weeks; he then becomes ambulatory for three additional weeks and returns to light work five weeks after operation.

End Results.—No operation for any surgical lesion is 100 per cent curative. Enough cases now have been done throughout the country during the last thirteen years, since the lumbar protruded disc syndrome was first clarified, to allow end results to be rather accurately evaluated. The diagnosis and operative technic have been well standardized in neurosurgical clinics and the attention of neurosurgeons is now centered especially on proper and careful selection of the patients for operation and evaluation of end results. During the recent war, two neurosurgeons studied separately the end results in two large series of patients, one a civilian group, the other military. The figure at which each arrived independently was almost identical and probably represents the most accurate and honest end result today: Approximately 50 per cent of patients operated on for removal of lumbar discs are relieved, or almost completely relieved, of their back and leg pain and can return to their former work; of course, in the civilian group there were a certain number of compensation cases, notorious for their lack of interest in returning to work while compensation is being paid; in the military group there were a certain number of patients who, either subconsciously or deliberately, evaded front line or other disagreeable duty by invoking postoperative backache or leg pain, so that toward the end of the war, the military surgeons were instructed not to operate on any protruded disc cases but to give such patients a medical discharge without operation as unfit for active military duty. In the long run, we believe that protruded disc cases fall into two main classifications: (1) the rather acute and severe cases of only a few weeks' duration at most (in these patients, a large disc is almost always found and the end results are usually excellent), and (2) patients with a long history of backache (several years or more) and unilateral leg pain in whom a small disc or none at all may be found. We now believe that all patients with a history of severe backache for several years before the sciatic pain develops probably should undergo a combined operation for fusion and disc removal, as the end results will be more satisfactory. Orthopedists generally agree with this plan.

Familial Sciatica.—We recently have carried out the sixth lumbar disc operation in a family of eight individuals, six of whom (the father and five of his children), have had sciatica. The mother and one son never had sciatica, the latter being the only one of six siblings (three male, three female) not so afflicted. The father had severe sciatica many years ago but was never operated on; one son required three operations (two recurrences), and another son has had a single operation for removal of a protruded disc. All three daughters have or have had sciatica, two of them having been operated on for removal of protruded discs. Curiously enough, none of them had any history of trauma and it was concluded that a congenital etiologic factor was more probable in this group of cases than in the average patient. Bradford and Spurling[3] stated that it is evident that developmental anomalies may contribute to prolapse of the nucleus pulposus into the adjacent vertebral body (Schmorl's nodules) but there are no reports to indicate that posterolateral protrusions of the nucleus pulposus causing sciatica are due to congenital defects. The rarity of protruded discs before the third decade of life is in accord with this view. However, when one considers the multitude of embryologic changes taking place in the intervertebral disc from the time the primitive nucleus pulposus arises from the notochord and the modification of the primitive nucleus pulposus by extension of tissues from the intervertebral disc anlage (Keyes and Compere, 1932), it seems not unlikely that a congenital defect (questionably in the capsule) is present in some cases of protruded disc, especially in those patients in whom there has been no definite traumatic history, as in the six patients of the family just described.

UNILATERAL CERVICAL OR CERVICOTHORACIC PROTRUDED DISCS

History and Subjective Symptoms.—Protruded discs in these locations are analogous in many respects to those in the much more common

lumbosacral region. The earliest descriptions of herniations of the nucleus pulposus in the cervical spinal canal are those of Stookey[4] in 1928. Since then, Semmes and Murphy,[5] Spurling and Scoville[6] and Ulmer and Meredith[7] have enlarged upon the clinical syndrome by calling attention to the symptoms which result from compression of the sixth, seventh and eighth cervical roots by a herniated nucleus pulposus. The relationship of the spinal cord to the cervical spinal canal and its fixation by the dentate ligaments in comparison to the size of the canal in the lumbar area and the roots of the cauda equina, makes it obvious that, in the former instance, neurologic symptoms may be more pronounced than when the cauda equina is compressed in the lumbar area by the same pathologic lesion, as emphasized by Loyal Davis.[8] Pain and stiffness of the neck often are the first symptoms of a protruded cervical disc and attacks may recur without interval symptoms. Coughing and sneezing, or carrying heavy objects such as a pail of water, greatly exaggerate the neck and arm pain. There is occasionally a history of indirect trauma, as was the case in one of our patients who used his shoulder to hold up a ramp temporarily while at work in the shipyard; pain developed in the cervical spine and down one hand to the fourth and fifth fingers; operation disclosed a protruded disc at the seventh cervical interspace compressing the eighth cervical root, removal of which relieved him entirely and immediately of his pain. Although most observers emphasize that the lesion is more often at the fifth and sixth cervical interspaces than anywhere else, the lesions in the first two cases seen and operated on in our clinic several years ago were at the seventh interspace, compressing the eighth cervical root and causing pain to extend to the fourth and fifth fingers. A disc at the fifth cervical interspace usually causes pain in the thumb or index finger, although Crutchfield, of the University of Virginia, emphasized the presence of pain and hypesthesia over the deltoid muscle in lesions at this level. A protruded disc at the sixth cervical interspace typically induces pain in the median nerve distribution of the hand, whereas a disc at the seventh interspace, between C_7 and T_1 vertebrae compressing C_8 root, causes pain to extend into the ulnar nerve distribution of the hand. The completely correlated clinical-x-ray syndrome consists of a diagnostic triad: (1) one should be able to demonstrate a narrowing of the interspace on x-ray examination corresponding to (2) the distribution of the pain in the hand and fingers, together with (3) localized tenderness with radiation of pain down the arm and hand when pressure is made at the appropriate cervical interspace with the examiner's thumb. These patients may carry the arm in a sling or at least keep the elbow flexed voluntarily, rather than allow it to swing normally in a dependent position while walking. In one of our first cases the patient slept all night in a Morris chair with the painful arm resting on the arm of the chair; this was the only manner in which she could obtain relief from the shoulder and arm pain. The unilateral pain in the shoulder, arm and hand often is associated with disagreeable paresthesias, or a "pins and needles" sensation and a greater or lesser degree of numbness may be noted subjectively, or may be present to pin prick stimulation in the affected shoulder, arm or certain fingers of the hand. One of the main points to keep in mind in diagnosing cervical protruded discs is that it is a precise syndrome, even more so, perhaps, than in the lumbar end lumbosacral cases, with posterior cervical (neck) pain exaggerated by neck movements and coughing and sneezing, and definite severe radiation down the arm and forearm to the hand and one or more fingers; the opposite arm and hand usually are free from pain. The patients usually state that the application of dry heat to the neck and shoulder relieves the pain to some degree.

Positive Neurologic Findings.—Retraction of the head backward and toward the painful shoulder exaggerates the pain down the arm, as does forcible vertical downward compression suddenly applied to the vertex of the patient's extended head. Localized tenderness at one or more cervical interspaces is found on thumb pressure, preferably with radiation of the pain to the hand or fingers. Sudden traction of the extended arm downward exaggerates the pain, as does bilateral jugular compression in some cases. In the C_5 and C_6 interspace disc lesions, the biceps jerk may be diminished and in C_7 interspace disc cases, the triceps jerk is usually diminished compared with the normal arm. Definite hypesthesia or actual anesthesia is found in the appropriate dermatome, i.e., in C_7 interspace lesions over the ulnar distribution of the hand, in C_6 interspace lesions over the median nerve distribution of the hand, and in C_5 interspace lesions over the thumb and/or first and second fingers. There may be early atrophy of the intrinsic muscles of the hand. There often is definite weakness of the hand grip and of the triceps or biceps muscles on the affected side. Tenderness over the scalene muscle may be present but this latter finding should not confuse the examiner into thinking that section of the scalene muscle

is required primarily, as this often is but a secondary muscle spasm in all probability caused by the cervical disc syndrome. It is likely that in the past some cases of the scalene compression syndrome were, in reality, cervical disc cases in which removal of the cervical disc would have produced more complete and lasting relief of the symptoms than section of the scalene muscle.

Diagnosis and Differential Diagnosis, X-ray Examination, Question of Lumbar Puncture and Pantopaque Study.—In typical cases the diagnosis is readily made from the above symptoms and signs and operation can be carried out with virtual assurance that a protruded cervical disc will be found. However, because of the fact that these discs occur in the region of the solid cervical cord, as contrasted to the cauda equina in the lumbosacral disc cases, more severe and dangerous syndromes can and do occur if there is a central or midline protrusion of a cervical disc. In 1942, such a case was seen in our clinic which had produced an almost complete quadriplegia, weak flexion of the arms still being preserved, with a complete subarachnoid block from a protruded central disc at the sixth cervical interspace; this was removed transdurally* after cisternal lipiodol showed a block at the sixth interspace level and the patient made a slow but almost complete recovery, except for slight residual spasticity. If the lesion protrudes against one side of the cord only, anteriorly, a Brown-Sequard syndrome may result, with paralysis of the leg on the side of the lesion and sensory loss on the opposite side of the body up to the level of the lesion, simulating a cervical cord tumor.

However, we are considering here primarily the more common cervical disc lesions analogous to those in the caudal end of the spine, producing unilateral hand, arm and shoulder pain only. X-ray films are always made of the cervical spine to include T_1 vertebra, if possible (anterior, posterior and lateral). A moderate degree of spondylitis does not exclude a protruded disc, especially if the arm and hand symptoms are unilateral. Old, forgotten traumatic lesions, spinal (bony) tumors (primary or metastatic), cervical ribs and other abnormalities are excluded. In some cases, it is almost impossible to distinguish between narrowing of a vertebral body from old trauma and narrowing incident to arthritis. A lumbar puncture is rarely indicated in these cases, nor is a pantopaque injection. In army hospitals during the war, 6 cc. of pantopaque were sometimes injected in the lumbar canal, the patient placed in sharp Trendelenberg position and defects searched for in the lower cervical spine. In our judgment, the clinical syndrome usually is so precise that this is unnecessary; we have had no proved case of cervical protruded disc in our clinic demonstrated by Pantopaque study alone, i.e., in which the clinical findings were equivocal. The rarer cases in which the cervical cord itself is compressed anteriorly are investigated as one would a suspected cord tumor, i.e., by lumbar puncture, Queckenstedt test and pantopaque localization of the mass lesion; as a matter of fact, such lesions of compression of the solid cervical cord by discs usually are operated on as cervical cord tumor suspects (intramedullary or extramedullary).

As cervical disc cases are much less frequent than lumbosacral disc cases, a brief summary of two recent histories from our clinic may epitomize the syndrome more clearly. One was at the sixth interspace, the other at the fifth.

CASE 1.—Sixth Interspace Disc. A physician's wife, age 44, was admitted September 12, 1947. During the previous eight months she had had three attacks of pain in the posterior cervical region and the right arm which extended to the dorsum of the middle finger. There was weakness of the muscles of the right arm and hand, hypesthesia to pin prick stimulation of the dorsum of the right middle finger, and absent right triceps jerk. She held her head carefully to avoid neck pain. X-ray films showed a definite narrowing of the sixth cervical interspace, where local thumb pressure induced pain extending to the right third finger; the left arm was free of pain. At operation (hemilaminectomy, intratracheal anesthesia), the seventh cervical root was exposed at the sixth interspace on the right side. The root was fixed and immobile from a mass anterior to it. At the junction of the root and the cord, a half gram mass of cartilage was removed extradurally without undue difficulty. The seventh cervical nerve root was then freely movable. The patient made an uneventful recovery, was discharged eight days later free of pain, and has since done well, except for residual discomfort in the cervical spine which is relieved by diathermy. The arm and hand pain has entirely disappeared.

CASE 2.—Fifth Interspace Disc. A 39 year old man was admitted October 23, 1947. He complained of pain in the posterior cervical region and in the right arm extending to the thumb and second and third fingers; at first, he emphasized the fact that the pain was in the second and third fingers; however, one or two days before operation, he stressed the thumb as being the chief locale of the pain. The syndrome had begun two years previously with a "crick" in the

*Operation by Dr. J. L. Ulmer, Resident Neurosurgeon.

neck, noticed when he lifted upward; later, the right hand and forearm became numb and the thumb would adduct involuntarily. In turning the neck, severe pain developed, extending to the right hand. There was hypesthesia of the right first and second fingers, and definite narrowing of the fifth cervical interspace as shown by x-ray examination; at this interspace, maximum tenderness was obtained on thumb pressure by the examiner. The patient had discovered that placing the arm away from the chest wall on a board relieved the pain. At operation (October 27, 1947), a right fifth interspace protruded disc was found and removed extradurally without difficulty, followed by dramatic relief of pain in the arm, hand and first three fingers of his right hand.

Operation (Occasionally a Bilateral Laminectomy with Opening of the Dura is Necessary in Cervical Disc Cases).—Intratracheal anesthesia is ideal for cervical laminectomy and is invariably used in our clinic. In the average case, one or at most two adjoining cervical interspaces are inspected unilaterally. Great care is necessary in exposing the affected root or roots as the cervical cord is adjacent to the operative field and, according to reports, the cord has been contused at operation, resulting in a greater or lesser degree of quadriplegia postoperatively. A hemilaminectomy is the rule as in the lumbosacral region, unless symptoms are present suggesting an anterior midline protrusion against the cord itself, when a complete laminectomy with the opening of the dura is indicated. Ordinarily, the affected root is exposed extradurally after resection of the ligamentum flavum and, if a disc is present, it can then be demonstrated almost immediately by the fact that the root is very tense, protrudes backward and can be moved with a dissector only by firm pressure. Cervical roots radiate almost transversely lateralward and are short and taut compared with the obliquely extending lumbosacral roots. The root is deflected slightly cephalward or caudalward and the disc removed extradurally with a small rongeur or Kelly hemostat. The dura is not opened in the average case of unilateral cervical disc. Postoperatively, there is almost always dramatic relief of the pain, especially in the lower arm, hand and fingers. Transient hypesthesia and slight weakness of the affected hand may be present for a few days, but we have seen no more serious or permanent ill effects from the operation in our clinic. The patients usually are discharged from the hospital in seven to nine days, considerably earlier than in the lumbosacral cases.

End Results.—The percentage of permanent good results in cervical disc cases is greater than that in the lumbosacral group. There appears to be, in the first place, a considerably smaller number of compensation cases in the former than in the latter type of lesion. But, aside from this factor, the pain usually disappears promptly after operation and the patient is well pleased with the result. Negative explorations, as in lumbosacral cases, do occur and in our experience these patients do almost or equally as well as those in which a protruded cervical disc has been removed. Perhaps the decompression of the root alone in the cervical region accomplishes more lasting benefit than in the lumbosacral area.

SUMMARY

The syndromes of lumbar and lumbosacral protruded discs and of cervical or cervicodorsal protruded discs have been presented in some detail. The history, subjective complaints and objective findings on examination, methods of precise diagnosis, operative technic and end results have been described.

It is suggested that if the diagnostic methods herein outlined are used for the selection of patients for operation, the end results, which, after all, are the most valuable criteria in determining the real worth of any operation, will be constantly improved in the future to the greater benefit of the patients and also to the greater satisfaction of the physician.

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CARDIAC EMERGENCIES*

By SAMUEL M. JACOBSON, M. D., F.A.C.P.,
Cumberland, Md.

Heart disease as a rule is more or less chronic in its manifestations. Proper treatment depends on an accurate diagnosis. One can take a careful history, examine the patient in relative leisure, make whatever laboratory and diagnostic studies he desires. He can contemplate the differential diagnosis and then institute a plan of treatment.

Often, however, the practicing physician is called upon to make a quick decision, to make a rapid appraisal of the physical signs noted and to institute immediate treatment. Effective treatment in emergencies depends upon proper diagnosis, because sometimes it means the saving of a life. And if the presenting symptoms and signs are not clear-cut (as in a typical coronary attack) then the physician's diagnostic acumen is put to a great test.

A patient has fainted. Is it unimportant or is it a sign of a grave disorder? A patient is awakened during the night with dyspnea. Is it bronchial asthma or is it the beginning of pulmonary edema?

As a rule there is some particular reason, a presenting symptom that causes the patient to call the doctor. Those of cardiovascular origin are usually one, or a combination of four: (1) chest pain, (2) dyspnea, (3) syncope, and (4) palpitation.

Chest pain in emergency cardiac conditions may be caused by a variety of conditions. Coronary occlusion and angina pectoris are the most common causes. Dissecting aneurysm, acute pericarditis, effort syndrome, cardiac arrhythmias and pulmonary embolism also may be causes. Noncardiac conditions such as pneumothorax, bronchial spasm, pleurisy, pneumonia, massive collapse of the lung, bronchial carcinoma, acute hemorrhage from a peptic ulcer, diaphragmatic hernia, carcinoma of the stomach, gallbladder disease, arthritis of the spine, acute pyelitis. tabetic crisis, or even herpes zoster or cardiac neurosis may be the reason for the night call. We must not forget that the public has become familiar with the symptoms of coronary thrombosis. Pain in the chest will, therefore, cause a patient to call a physician at once.

The pain in acute coronary occlusion may occur at any time, commonly during sleep, but that of angina pectoris usually follows exertion, excitement, overeating, an emotional upset, an argument, and so on. The pain may last for hours in coronary occlusion, usually a few seconds or, at most, a few minutes in angina pectoris.

The patient during an occlusion is in shock: he has the appearance of great anxiety, of being in the throes of impending death, is restless, sweating, pale, ashen gray in color. Evidence of congestive failure may be present. If he can, he describes the pain as "indescribable," crushing in character, as if he is being squeezed in a vise. It may radiate down both arms, to his back or into his neck. Its severity may gradually diminish. It may begin in the epigastrium and then would have to be differentiated from a perforated peptic ulcer or acute cholecystitis with cholelithiasis.

In anginia pectoris the patient is seized with a sudden, severe or variable pain over the precordium which typically radiates down the left arm to the little and ring fingers. It may reverse itself, that is, begin at the elbow and go to the precordium or up to an ear or the angle of the jaw. The patient will stop where he is, will be quiet, immobile, and the pain may subside without therapy. His color is good, there is no sweating, no dyspnea.

The pulse in angina is usually normal; in coronary occlusion it is rapid and weak, and ventricular tachycardia may supervene.

In angina the blood pressure is normal or elevated; in coronary occlusion it usually falls to a low level and pulsus alternans may occur.

The temperature in angina is normal; in coronary occlusion at first it is subnormal though it may go as high as 101 F. in twenty-four or forty-eight hours.

Examination of the heart in angina usually shows it to be normal, but during an attack of coronary occlusion the sounds are rapid and feeble. If the infarction is on the anterior surface a friction rub may be heard later and a gallop rhythm may supervene.

Later on when laboratory results are available one finds in coronary occlusion a leukocytosis with an increase in the percentage of polymorphonuclear leukocytes and an increase in the sedimentation rate of the blood.

The treatment and the effects of treatment are just as different as the typical symptoms. There is one thing in common in these two conditions: the patient may die during an attack.

In angina pectoris nitroglycerin grains 1/100 under the tongue may abort an attack. Sometimes the dose has to be repeated every five

*Presented before the Potomac Valley Medical Society, at Burlington, West Virginia, July 9, 1947.

or ten minutes. An ampul of amyl nitrite crushed in a handkerchief or gauze and inhaled may abort an attack. At other times a hypodermic of morphine sulfate grains ¼ may be necessary. At times a drink of whiskey will stop an attack. In milder attacks, stopping and resting for a few minutes will relieve the pain.

In coronary occlusion morphine sulfate must be given hypodermically, immediately, in sufficient dosage to quiet the pain, a hypodermic of ¼ grain, repeated in ten to twenty minutes, and again if necessary. The patient should not be moved. He should be made comfortable wherever he is, on the street, in a movie, in a store, or at home. Oxygen is advantageous, especially if cyanosis is present. Sometimes 50 cubic centimeters of 50 per cent glucose intravenously gives quick relief to a failing myocardium.

If the patient is pulseless it is permissible to give a hypodermic of 0.5 cubic centimeters of aqueous solution of adrenalin (1:1000).

One must use his best judgment at the time. It would seem that the shock should be aided by the administration of plasma. Still, in a relatively short time acute pulmonary edema may supervene and blood letting would then be in order.

Two possible immediate complications must be watched: (1) heart block with Adams-Stokes syndrome may be controlled by subcutaneous injections of 0.3 to 0.5 cubic centimeters of a 1:1000 adrenalin solution repeated if necessary every two hours for twenty-four to forty-eight hours. (2) Paroxysmal ventricular tachycardia may cause collapse and death. Quinidine sulfate should be given immediately. Indeed, some cardiologists give quinidine routinely for the first several days following an acute coronary occlusion to prevent paroxysmal tachycardia. The effective dose will vary with each case. It is well to begin with a 3 grain capsule or tablet of quinidine sulfate to test for sensitivity to the drug. Some patients will require 3 grains three times a day or four times a day while others will need two or three times that amount. Digitalis should not be used unless there is evidence of congestive failure. A number of conditions may confuse the situation: conditions resembling acute surgical diseases of the abdomen such as acute pancreatitis, acute appendicitis, acute cholecystitis with or without stones, or perforated peptic ulcer. Acute coronary occlusion may resemble any of these and each in turn may resemble a coronary attack. And it is to be remembered that a patient may have both a coronary occlusion and a perforated ulcer.

An electrocardiogram may clarify a doubtful diagnosis and disclose evidence of myocardial disease, coronary insufficiency at times, or various arrhythmias. Multiple chest leads and serial electrocardiograms are sometimes necessary.

Laboratory procedures including blood counts, urinalysis, blood chemistry and sedimentation rates also are of value in making a differential diagnosis.

A large pulmonary embolism causing a pulmonary infarction or lodging in the pulmonary artery may obstruct the flow from the right side of the heart (acute *cor pulmonale*) and cause sudden death. If it does not cause sudden death, then the ashen, sweaty appearance of the patient in shock, together with excruciating chest pain, dyspnea, rapid thready pulse, falling blood pressure (especially if the infarction is in the left lung) will tend to confuse the picture still more. If this acute episode follows a recent surgical procedure, a fracture, or phlebitis, one should think of *cor pulmonale* as the more likely diagnosis. If the patient lives long enough, an early electrocardiogram may make the differential diagnosis simple, for electrocardiographic changes will take place which are diagnostic of acute *cor pulmonale* and pulmonary infarction. A few days hence, an x-ray may show the pulmonary infarction.

Dyspnea, usually during the night (called nocturnal dyspnea) is frequently the cause for great alarm and results in numerous emergency calls for the physician. It may begin with a slight sense of suffocation which awakens the patient and causes him to cough repeatedly, as if to clear his throat. Then the sense of suffocation gradually increases until, even on several pillows, or sitting upright or standing, he has dyspnea (orthopnea). When the physician arrives the patient is pale, in a cold sweat, ashen gray, fighting for air, coughing, perhaps expectorating frothy, blood-tinged sputum. His chest is full of coarse, moist rales and he is "wheezing". This is the picture of pulmonary edema and of so-called "cardiac asthma".

Paroxysmal dyspnea, especially paroxysmal nocturnal dyspnea, is seen most commonly in hypertensive heart disease, syphilitic aortic insufficiency and coronary artery disease, but is rarely found in rheumatic valvular disease. Unless promptly relieved the patient will die. Of course, in mild attacks the patient may be relieved spontaneously in fifteen minutes and go back to sleep. But when the physician is called the case is usually beyond that stage.

A hypodermic of morphine sulfate grains ¼ with atropine sulfate grains 1/150 once, or re-

peated, may relieve a mild attack. If there is no relief in ten or fifteen minutes and the patient has hypertension, venesection and withdrawal of 500 cc. of blood may be helpful. One may use so-called bloodless venesection by putting tourniquets on both arms and thighs, and reducing the pulmonary edema by lessening the load on the left ventricle. As the attack subsides one tourniquet at a time is loosened until all have been released. Oxygen is a great help in these cases. Aminophyllin grains 3¾ or grains 7½ used intravenously with caution is effective in cardiac asthma. Then one must watch the patient carefully. One may wish to digitalize the patient and keep him digitalized to prevent further attacks. Another helpful drug is a mercurial diuretic, occasionally, even if edema is not present, and again to prevent recurrences.

There are three conditions that may confuse this seemingly typical picture: (1) dyspnea and even pulmonary edema may be the first signs of coronary thrombosis, (2) embolism and pulmonary infarction may cause such dyspnea and pulmonary edema, and (3) an attack of paroxysmal rapid heart action, regardless of the type, may cause air hunger, especially in a patient with known organic heart disease.

Bronchial asthma in an elderly patient should not be too confusing because of the history of asthma during the day, continuously, the presence of emphysema, and a history of chronic cough.

Syncope may be unimportant or important. It may be so-called simple or emotional syncope (fainting) or it may be a sign of an important cardiac condition.

There are many reasons why a person faints, or has simple or emotional syncope. Some individuals of the neurocirculatory type faint very easily, almost at will. Overheated or overcrowded rooms, a sudden fright, the sight of blood, changes in posture, a pin prick when a vaccine is administered, or the taking of blood for laboratory tests in some instances will cause fainting. All of us are acquainted with that type of case. The patient becomes pale, light headed (cerebral anemia), sweaty and faint. His pulse rate and volume are good. When the doctor arrives he usually is conscious.

In those who have such repeated episodes, one can try small doses of atropine as in tincture of belladonna five to fifteen drops three times a day or ephedrine sulfate grains ⅜ to ¾ three times a day. One must remember that a sudden, massive internal hemorrhage may cause a person to faint.

When an elderly person is seen who has had a syncopal attack and whose pulse is under 40, one can suspect that he has had an Adams-Stokes seizure. This is the result of serious heart disease. Typically, there is a sudden, unexpected, painless, unconscious spell. There may or may not be associated convulsions. They may occur frequently or infrequently and the length of time of each attack may vary considerably. These attacks are due to a sudden slowing of the ventricular rate or to failure of the ventricles to contract. The severity of the attack depends on the length of asystole. Uusually there is complete dissociation between the auricles and the ventricles, the auricles beating between 90 and 110 times a minute, the ventricles 18 to 40 times a minute. Sometimes when one feels a pulse of 40 or less per minute he can also see auricular waves in the neck vessels which are more frequent. The electrocardiogram illustrates very clearly the dissociation between the auricles and the ventricles.

Besides treating the underlying disease that causes the Adams-Stokes seizure, one must also treat the patient for the syncopal attacks themselves. Adrenalin is given subcutaneously 0.3 to 0.5 cc. of a 1:1000 aqueous solution. If necessary, it can be repeated every two to four hours for twenty-four hours or more. If the patient is ambulatory and the condition is chronic then the administration of ephedrine sulfate by mouth grains ⅜ two or three times a day may prevent the attacks. Barium chloride by mouth, grains ½ to grains 1 three or four times a day is said to inhibit attacks. Other preparations such as propadrine and benzedrine have been used, also adrenalin 1:100 solution by inhalation. If the patient is decompensated the slow rate is not a contraindication to digitalization.

Unless one is certain of the diagnosis, he must be careful about using adrenalin, because if the mechanism is ventricular tachycardia, the adrenalin may change it to ventricular fibrillation and death may ensue.

Paroxysmal rapid heart action (paroxysmal tachycardia) may cause a marked diminution in the amount of blood supplied to the brain and syncope may follow. Even in a well compensated heart or a structurally normal heart, the sudden change from a rate of 70 or 80 to 200 or more may cause circulatory collapse. Syncope, congestive failure and pulmonary edema may supervene. Even anginal pain may occur. Therefore, it is important, when possible, to attempt to discern by the examination of the heart the type of paroxysmal tachycardia which is present.

Another type of syncope is caused by a sensitive carotid sinus. There is a group of people who have hypersensitive carotid sinus reflexes. Turning the neck a certain way, wearing a high collar, or irritation by a neighboring gland will cause slowing of the heart rate with fainting. Usually the attack lasts a few minutes without any of the concomittant signs present in epilepsy. One can usually test for hypersensitivity in such a patient by lightly and then more firmly, massaging the area of the neck where one feels a bulging at the bifurcation of the carotid artery, first on one side and then on the other. When one discovers such a case, ephedrine sulfate grains ⅜ to ¾ three or four times a day, or atropine sulfate grains 1/200 to 1/100 two or three times a day, or tincture of belladonna 10 drops three times a day may inhibit the attacks. The removal of an irritating gland or the resection of the nerve plexus in this area many times results in a permanent cure.

Syncope may also be produced by factors unrelated to the heart and these must be differentiated from real cardiac causes by the attending physician. Epilepsy, cerebral hemorrhage or thrombosis should not be too difficult to detect if they are kept in mind and a good history is obtainable.

Acute hemorrhage whether from the nose, the lungs, or the gastrointestinal tract may be an emergency. Treatment should be directed to the underlying cause.

When palpitation appears suddenly it is usually caused by an abnormal rhythm. The first attack usually occurs when the patient and his family are excited.

Simple tachycardia is recognizable when one feels the pulse or listens to the heart for several minutes. The rate will fall gradually. Abnormal rhythms usually begin and end suddenly.

Paroxysmal auricular fibrillation may be present in the absence of any other heart disease. It may accompany hyperthyroidism. Sometimes the paroxysm has ceased by the time the doctor arrives. Some physicians like to digitalize their patients at once if they have auricular fibrillation But if no heart disease is present and there is no evidence of congestive failure one can use quinidine sulfate. Likewise, there is no objection to the use of quinidine sulfate in an attempt to restore the auricular fibrillation to a normal rhythm after the patient has been digitalized.

When the rate is rapid and regular, between 130 and 160 beats per minute, the condition is apt to be flutter. Full doses of digitalis or digitalis-like preparations should be given to bring the pulse down to 72 or 80 beats per minute and then future treatment will depend on subsequent studies.

Nodal or auricular paroxysmal tachycardia may also occur in people with no other evidence of heart trouble. The rate is usually between 150 and 250 per minute. Carotid sinus pressure or pressure over the eyeball may cause the rate to drop suddenly to normal, or else will have no effect. At times holding one's breath, gagging, retching or vomiting, or induced vomiting will abort an attack. Drugs such as mecholyl 20 mg. subcutaneously may stop an attack. Because of its untoward effects in some individuals (and it is not recommended in those who have allergic tendencies or asthma) one should always have atropine sulfate or ephedrine ready in a hypodermic syringe for immediate use in mecholyl-sensitive patients.

Quinidine sulfate may not only stop an attack of paroxysmal auricular tachycardia, but given judiciously may help the patient to avoid one. Sometimes complete digitalization will gradually return the rate to normal.

When symptoms of congestive failure come on suddenly it becomes an emergency problem. Morphine sulfate grains 1/6 to ¼ hypodermically, oxygen, tourniquets on the extremities, digitalization, the removal of fluids from certain cavities if necessary and the mercurial diuretics are useful. Complete digitalization can now be accomplished by mouth, usually with one dose of digitoxin. Six 0.2 mg. tablets (1.2 mg.) is the average digitalizing dose, and 0.1 mg. to 0.2 mg. is the usual maintenance dose. With this rapid method of digitalization many of the toxic effects of powdered digitalis can be avoided.

Small puncture wounds of the heart with the slow accumulation of blood in the pericardial cavity and the slow accumulation of any type of pericardial effusion, may cause both tamponade and rapid heart action. In these cases there is a fall in blood pressure, a rise in venous pressure, dyspnea, orthopnea, cyanosis, tachycardia and decreased pulse volume. The treatment will depend on the cause.

SUMMARY

Cardiac emergencies and their effective treatment require a thorough knowledge of the outstanding manifestations of the more important signs and symptoms in such cases.

In this paper an attempt has been made to

review the more important cardiac emergencies, and their treatment has been discussed.

NOTE: When this paper was read the reports on the use of anti-coagulants in coronary thrombosis were too meager to allow one to reach any definite conclusions concerning their use. There are reports indicating that dicoumarol has a definite place in the prevention of certain complications which cause death in coronary thrombosis when it is properly used and the prothrombin time and coagulation time of the blood can be followed carefully and the tests are carried out in an efficient laboratory.

DIAGNOSING GASTRITIS

The stomach is not an essential organ. It serves primarily to store and mix ingestion. That the stomach secretions are not essential to health and well-being is borne out by the ever increasing number of patients who survive total gastrectomies without any demonstrable ill-effects.

Only a few years ago many of the early workers with the gastroscope felt they were opening up broad, new fields of investigation and through its employment were going to be able to relieve a large segment of the population from unnecessary suffering. Thus, Shindler and his co-workers found that 80 per cent of a group of patients diagnosed as psychoneurotics admitted to the clinics of Chicago University had evidences of some type of gastritis, and were unjustifiably labeled psychoneurotics. They predicted this would hold good for psychoneurotics in general and that it only remained to discover proper therapy for the condition to relieve these sufferers of their complaints. Some early workers even envisioned the gastroscope as replacing fluoroscopy and roentgenology in the study of upper gastrointestinal disturbances. However, it is felt by most investigators in this field that the place of the gastroscope is primarily an adjunct to x-ray study. The sole condition in which its usefulness excels that of radiographic study is in diagnosing gastritis.—W. Turner Bynum, M. D., in J. Okla. St. Med. Assn.

WE CHANGE WITH TIME

The medical forebears were giants among men. From the gizzard or the gullet of a lower form they named the disease: a flaming sky estimated the prognosis; the refraction of a light ray through a flask of wine marked the balance between health and sickness. And, as man became more observant, new labels were given ancient ailments and sometimes the treatment was found to be by the knife instead of by a decoction of herbs.

As it turned out a hundred years ago, the physician was a wonder among men—an encyclopedia of all medical knowledge, and his activity had no limit. He delivered the pregnant woman, cut the proud flesh around the plantar foreign body of the youngster, prescribed the tincture for the green sickness, shrove the erring and consoled the bereaved. This was the family doctor: this is what many of us have called the general practitioner.

He has survived the century, despite the expansion of the field of medical knowledge whose horizon now is beyond a single human's view. He has survived despite a vertical cataloguing of medicine into specialty skills.

Can he survive? I think he must, for there is need of a broad base to the practice of the healing art. The populace needs him and will seek inferior substitute if he is not available. And if he is honest in his intent, the mechanism of training him specifically for his interest should be simple to achieve. Then there is no problem or worry about his survival in the future.—William Bromme, M. D., in Detroit Medical News.

TUBERCULOSIS ABSTRACTS*

TUBERCULOSIS CASE FINDING

Selective Service boards after mass X-ray study of all inductees showed that 90 per cent of the men rejected for tuberculosis had minimal disease, whereas almost 90 per cent of the patients admitted to the sanatoriums in this country have advanced disease.

Adults, rather than children, are chiefly responsible for the spread of tuberculosis. Public health laws should insist on the mass X-ray examination of all school teachers, food handlers and domestics—a surprising number of whom are admitted to sanatoriums. Tuberculosis is found more frequently in certain occupations than in others. The danger of silicosis and tuberculosis is well known, and much has been done to control the hazard of silica dust.

Student nurses and physicians are often exposed to infection in their daily duties. Every patient admitted to a general hospital should have an X-ray examination of the chest. If this were done, it is believed that the prevalence of tuberculosis among medical students and nurses would be reduced.

Reports have shown a high incidence of tuberculosis among inmates of mental hospitals. These patients are a source of danger not only for other inmates but also for the attendants. Tuberculosis is also prevalent among the inmates of prisons. The confinement and frequent overcrowding of these institutions gives an opportunity for the disease to spread. Since many prisoners are later discharged to their homes and communities the danger is obvious.

It is an accepted fact that decent housing, an adequate diet and an acceptable standard of living are necessary to keep down the tuberculosis rate. If the disease is to be eradicated, greater effort will have to be made to abolish slum areas and crowded tenement districts.

Industry must play its part in the reduction in the morbidity and mortality of tuberculosis. A pre-employment examination, including an X-ray film of the chest, should be required. Well established standards for ventilation, sanitation, health education and personal hygiene should be enforced.

The opportunity of practicing physicians to find cases of tuberculosis is unquestionably greater than that of any agency. It is regrettable when patients are admitted to sanatoriums with far advanced tuberculosis after having been under treatment for months for chronic bronchitis. It is a safe policy for the physician to insist on an X-ray film of the chest whenever a patient's cough persists for more than two weeks. Any physician who waits to make a diagnosis of tuberculosis by auscultation imposes a grave responsibility on himself—nine out of every 10 cases by that time are in the advanced stage.

It is obvious that the crux of any program of tuberculosis control is early case finding by mass X-ray study and immediate segregation of the patient until he is well enough to return to his family and community. If a reduction in the mortality and morbidity from tuberculosis is to be achieved, the full support and cooperation of the general practitioner, the public, industry and public-health agencies are absolutely essential.

Tuberculosis Case Finding, John A. Foley, M.D., and John B. Andosca, M.D., The New England Journal of Medicine, December 5, 1946.

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The President's Page

The election of Dr. Thomas G. Reed, of Charleston, as president of the State Medical Association was another milestone in the history of West Virginia medicine. I congratulate the members who have this year used very fine judgment in selecting a young man who has been successful in business, a leader in his profession, who has served capably on numerous committees, and who is an able member of the Council from the 6th District.

It has been my pleasure for the past year to sit in on the Council meetings, and unquestionably Doctor Reed has developed the qualities of leadership we desire. It will be January before he takes over as President of one of the greatest organizations we have in the state of West Virginia. Like many of the men who have held this office in the past, he will be looking forward to the full support of the Association. From my own experience, I feel sure that he will receive it in good measure.

Speaking of organizations in general, there has been a peculiar disease developed in most of them, and we have named this disease "spectatoritis." This evil is perhaps more evident in connection with college athletics, where a few participate and many look on. It is true that there are a number of spectators in the West Virginia Medical Association, but as one looks them over and becomes acquainted with them, he finds that there is a wealth of material for leadership among them. Many have been with us for years, looking upon organized medicine and its annual advancement to the point where we ask ourselves over and over, "What does the future hold for us?" I am convinced that good leadership in any organization will answer that question.

I think if we study the responsibilities of the State Medical Association to its membership as a whole, one of the things we will notice particularly is that the primary responsibility is to develop the individual, and through this development enable him to find his proper place in the development of his medical career in organized medicine. When we speak of organized medicine and the study of this branch of our profession, we mean something that one must give without expectation of remuneration. It is a contribution to medicine by men who not only seek to serve their organization, but who hope that through efforts and activities, medicine will advance year by year to a higher plane.

The president of a medical association or any other organization, who has behind him the full support of each and every member, certainly is a fortunate executive. I think and I feel that in the coming year the problems that face us can well be handled by a man such as Tom Reed. He will be busy for the remainder of this year working within his own sphere, planning just what he will do for us in the years ahead. I am sure he will appreciate, and he may even ask that you give him such suggestions and offer to him such help as you may think will be beneficial to him in serving as president.

I know that it is his hope, as well as mine, that each and every component society of the West Virginia State Medical Association develop definite programs along the lines of organized medicine which are given to us from time to time through the pages of The Journal of the American Medical Association, and the West Virginia Medical Journal.

Tom has every reason to expect a successful year, and I say this because he has a fine group of medical men behind him who will furnish him the kind of support and cooperation every president needs.

Congratulations, Doctor Reed, and may all the things you hope for be yours in the succeeding years.

Thomas Rose

President.

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THE AMBER LIGHT

As Doctor Bess points out in his current President's Page, the theme of the 81st meeting of the West Virginia State Medical Association was a four-year medical school for West Virginia. Elsewhere in this issue of The Journal appears the address of Dr. Irvin Stewart, President of West Virginia University, relating to a four-year medical school for West Virginia. We strongly urge that every West Virginia physician give it thoughtful reading.

It should be kept in mind that Doctor Stewart has the perspective of past experience elsewhere and now occupies the pinnacle of the West Virginia educational system. He spoke as one at the head of the whole University, of which the medical school is but a part. He neither opposed nor approved the idea of a four-year medical school. As he has expressed it, he gave no green light to go ahead, nor the red light to stop, but rather the amber light to look around before starting.

There is much in the address that is controversial and which we hope will serve to cause comment in this column and elsewhere. His statements regarding the financial needs of the University can only cause shame and embarrassment to patriotic West Virginians.

If we are failing in our support of the state's highest educational institution, what can we infer regarding the lower levels? Boast as we may of our rich natural resources, we must still regard the youth of our state as the superlative resource, and its education as the outstanding measure of intelligent conservation.

We are glad that Doctor Stewart propounded the question, does the state of West Virginia owe the opportunity to study medicine to such of its youth who wish to do so, regardless of where they may elect to practice? Since such opportunities are afforded those wishing to study law or agriculture, for example, we believe the answer is obvious. The existence of our static two year medical course indicates how well that obligation is being met.

The medical profession is happy that Doctor Stewart has thrown the amber light. For much too long, as far as medical education at West Virginia University is concerned, the light has been just red.

THE USE OF CURARE IN MEDICINE

It was not so long ago that virtually the only time curare was mentioned in medicine was in connection with experimental work in the laboratory. All this has now changed. Curare presumably has found a fairly secure place in medicine. This preparation truly has insinuated itself from the jungle not only into the experimental laboratory, but into the surgical amphitheater as well.

It will be remembered that curare is an extract derived from several species of Strychnos and Menispermaceous plants. Present day commercial preparations of curare and its purified active principle, d-tubocurarine, however, are derived from a single plant, Chondodrendon tomentosum. It might be pointed out in passing that plants of the genus Strychnos do not contain strychnine. They were named at a time when alkaloidal chemistry was in its infancy and any plant capable of producing violent poisoning was apt to be included in this genus.

Since curare has been used for centuries by the Indians of the South American continent, it is frequently spoken of as "South American Indian Arrow Poison." It is of interest historically to mention that the use of these poisons was described by Sir Walter Raleigh as early as 1595. It is also of interest that the famous French physiologist, Claude Bernard, carefully studied the action of curare in his laboratory in 1857.

Curare is probably used in every physiology laboratory in the country. It is frequently em-

ployed to demonstrate the classical experiment that striated muscle tissue has independent irritability, that is, it is not necessary to stimulate its nerve to make it contract. Curare applied directly to a striated muscle or injected into the blood stream causes a paralysis of the striated muscle of the body. It does this presumably by acting on the motor-end plate, that is, the junction between the nerve-ending and the muscle tissue proper. The consensus is that curare has but little, if any, effect on smooth muscle. It has, furthermore, no effect on sensory nerves.

Since curare produces paralysis of the voluntary muscles of the body, these muscles become entirely relaxed. Relaxation is often desirable in surgical procedures, so it is not surprising that the anesthetists have added curare to their armamentarium. Although curare has no anesthetic action *per se,* it has been found to serve as a useful adjuvant to certain anesthetic agents, notably cyclopropane and pentothal. Many anesthesiologists are enthusiastic about the use of this preparation and a considerable amount of literature has been published on this subject.

Besides its use in anesthesiology, curare has been employed in certain conclusive states with fairly good success, particularly those produced by metrazol. It has also been used for the convulsions of strychnine poisoning, tetanus and hydrophobia. Some authors, furthermore, have reported its use in the relief of certain spastic contractures. It is conceivable that it would be of help in the management of dislocations, especially in heavily muscled individuals. Curare has, therefore, been employed in a variety of conditions.

It must be remembered that the muscles of respiration may become paralyzed by curare as well as others, for example, the abdominal muscles. When this happens, mechanical respiration must, of course, be given immediately or the patient will die of asphyxia. Fortunately curare is quickly excreted in the urine and in most instances the patient will soon start making voluntary breathing movements so that mechanical respiration may be discontinued. Whenever curare is used, it should be anticipated that it might be necessary to give mechanical respiration at a moment's notice.

It is not in order in this editorial to dwell at length on the dangers incurred in the use of curare; suffice it to say that it is a potentially dangerous drug. It should be employed only by those who are thoroughly cognizant of the risks involved and who are capable and ready to meet any emergency which may arise from its administration.

BEWARE STRANGE VOICES

We recently had brought to our attention a little story that may be a sample of what goes on in many parts of the state and country.

One of our members received a telephone call from an alleged stockbroker in Canada, who preached the virtues of the common stock of an alleged Canadian mining corporation. This member was wise and asked the broker to send him a prospectus. However, within a few days, he received a bill for $1,200 covering "stock purchased" for his account. Attached, was a letter in which it was stated that the certificate of stock would be mailed upon receipt of remittance. Of course, there was no remittance. Instead, the whole file was referred by the headquarters office of the West Virginia State Medical Association to the Securities Exchange Commission at Washington for investigation.

The reply of the Chief Counsel of the SEC to the inquiry is printed under the heading "Correspondence" in this issue of The Journal. We urge all of our members to read the SEC report, as there will possibly be phone calls to other West Virginia doctors from over the border. If we want to buy stocks or bonds, we don't have to go out of the country to do it. There are hundreds of reliable brokers here in the good old USA who will be glad to handle negotiations and furnish up-to-the-minuate information concerning corporations and stocks and bonds.

SOUTHERN MEDICAL IN MIAMI

The selection of Miami for the annual meeting of the Southern Medical Association in 1948 is announced in the lead editorial of the June issue of the Southern Medical Journal. The meeting is scheduled for October 25-28.

Adequate hotel facilities cannot be furnished for this meeting except in two or three cities in the south. All growing organizations seem to be having the same housing troubles experienced by the West Virginia State Medical Association for the past three years.

After reporting the still critical hotel situation throughout the United States, the editorial makes this point: "The fact that Miami offers enough hotel space to house the guests of a large convention comfortably, and that few other cities in the territory are now able to do that, with the fact that the Miami meeting in 1946 was one of the most felicitous and most enjoyed of the forty previous gatherings, have made this city again two years later the choice for the convention of 1948. There is no more beautiful and fascinating metropolis in the United States."

The executive committee of the Southern Medical Association, weighing the difficulties that would be experienced in scheduling the convention elsewhere, unanimously accepted the invitation of the Dade County Medical Association to meet in Miami.

West Virginia is always well represented at meetings of the Southern Medical Association. Many of our doctors will no doubt postpone their annual vacations this year until October so as to attend the 42nd annual meeting of this second largest medical group in the United States.

LONG OVERDUE

Mississippi, like West Virginia, is trying to work out of its two-year medical school rut. The situation in that state, so very much like our own, is aptly reported in an editorial in the June issue of the Mississippi Doctor, which we reproduce in its entirety:

> "A few days ago we read an article in *Life* magazine to the effect that each year over 2,000 qualified students who have completed their pre-medical education apply for admission to Columbia University medical school, and only 100 can be admitted.
>
> "The same day we read an article in the *Jackson Daily News* to the effect that the U. S. Veterans Administration would likely locate a twenty-million-dollar hospital in Jackson, and if we had a four-year medical school there the location would be almost a certainty, as it would then be classed as a medical center. We read another article to the effect that several times as many apply for admission each semester to the Ole Miss two-year medical school as can be admitted. A few nights ago we heard former Governor Arnall, of Georgia, in a speech at Blue Mountain College, emphasize the need for more doctors throughout the country. He estimated the need at 68,000 more physicians than we have now.
>
> "The health authorities agree that Mississippi needs at least twice as many doctors as we have, and a large portion of those we have are past 60 and the number is rapidly diminishing. There are about two million people in the State of Mississippi. We do not have a medical school, except the two-year school at Ole Miss.
>
> "The greatest asset of any people is health. The greatest need of people is adequate medical service. The doctors we have are doing a marvelous job, but they can just do so much and there is not enough to do the work that needs to be done. The recent session of the legislature appropriated many million dollars for different building programs, but they turned down the proposal to appropriate five million dollars to construct a medical school. The people of Mississippi should insist that they make this appropriation at the next session of the legislature."

While hundreds of thousands of dollars have been spent at West Virginia University to build up various schools, our school of medicine has stood still. The need for a four-year school was never more apparent than at the present time when students completing their pre-med course find the doors of medical schools barred to them. Even in our own state, except for twenty graduates of the two-year school, our pre-med students have to beg and plead to be accepted in medical schools for the purpose of completing their third and fourth years.

Were it not for our arrangement with the Medical College of Virginia, under which we are permitted to enroll twenty students at an annual subsidy of $1,000 each, medical education in West Virginia would, indeed, present a problem that could not even be partly solved under present conditions.

The unanimous vote of the Council in favor of a four-year school of medicine, backed by a one hundred per cent expression of approval by the members of two key committees of the State Medical Association, is a true expression of the feeling of organized medicine that for too long a time have we just waited for something to happen.

If other states comparable in size, population, and wealth can successfully build and maintain four-year schools of medicine, then West Virginia can most certainly do likewise. Too long have we waited. Let's give our young people who want to be doctors an opportunity to complete their medical education in this state. Some definite step in this direction is long overdue.

BABIES AND BABY-SITTERS

Baby-sitters were frowned upon by Dr. Benjamin Spock, Rochester, when he spoke at the Midwestern Conference on Nursery Education in Minneapolis on April 3. Pointing out that babies who are looked after by a different baby-sitter every night may grow up with various anxieties and other serious characteristics, Dr. Spock stated, "At the age when children form their strongest emotional attachments to their parents and need that kind of security, they're being cared for by a string of strangers." Dr. Spock is director of the Rochester child health project.—Minnesota Medicine.

ALLERGY AND COAL SMOKE

From the standpoint of the public I would say that the most prolific source of annoyance among allergic individuals is coal smoke. As far as we know this effect is a non-specific one, but it is not improbable that some day a specific allergen may be discovered in such smoke. Although the large city railway stations and loading platforms are chiefly responsible, the surrounding territory and the passengers on the trains are not free from this hazard.

It is common for allergic persons to experience an attack of asthma or a sneezing fit in these environments, particularly in the sheds on the way to boarding trains, when the engines are belching acrid fumes. I venture to say that it is not unlikely that a great deal of the asthma and rhinitis which people experience in the city is due to the coal smoke from the railway industries and, of course, other industries. I believe that the time is not far off when this problem will have to be solved. —Samuel M. Feinberg, M. D., in Industrial Medicine.

General News

1949 LEGISLATIVE PROGRAM PLANNED BY ASSOCIATION KEY COMMITTEES

An active campaign for the establishment of a four-year school of medicine in West Virginia has been launched by the West Virginia State Medical Association. With the solid support of the Council, and backed by the unanimous vote of the fact finding and planning committee and the legislative committee, a sub-committee of these two Association key groups is now doing the spade work that will determine whether West Virginia is to continue to worry along with a two-year school, or branch out in a big way and take her proper place in medical education with other states which are supporting a four-year school of medicine.

The sub-committee, named at a joint meeting of the fact finding and planning and the legislative committees, held June 6 at Parkersburg, is composed of Drs. Thomas Bess, of Keyser, president of the State Medical Association; Wade H. St. Clair, of Bluefield, chairman of the Council; Thomas G. Reed, of Charleston, president elect; D. A. MacGregor, of Wheeling, chairman of the fact finding committee; and Frank V. Langfitt, of Clarksburg, chairman of the legislative committee.

It is thought that this group will be ready to report back to the joint committee sometime in July.

The members of the two committees went on record as approving the enactment of legislation making the illegal practice of medicine in West Virginia a felony instead of a misdemeanor. The following sub-committee was appointed to study and report concerning the advisability of requiring a biennial registration of doctors in this state: Dr. James L. Wade, Parkersburg, chairman; and Drs. Frank V. Langfitt, of Clarksburg; Walter E. Vest, of Huntington, *ex officio*; and N. H. Dyer, of Charleston, *ex officio*.

Taking cognizance of the resolution adopted by the House of Delegates at the annual meeting in Huntington in 1947, directing the legislative committee to seek legislation at the 1949 session, requiring "that the same standards of education and training be met by all who are to practice medicine and surgery in West Virginia, and that all be required to take the same medical board," a sub-committee was appointed to confer with a similar committee to be named by the West Virginia Osteopathic Association. The Association committee is composed of Drs. D. A. MacGregor, and Frank V. Langfitt, joint chairmen; and Drs. Bert Bradford, Jr., of Charleston, C. O. Post, of Clarksburg, Russel Kessel, of Charleston, James S. Klumpp, of Huntington, Walter E. Vest, *ex officio*, and N. H. Dyer, *ex officio*.

One of the more important matters discussed at the five-hour session at Parkersburg concerned the proposed complete reorganization of the state department of health. As a basis for the reorganization, the committee considered Dr. Andrew E. Amick's resolution on the subject, offered at a meeting of the Council in December, 1947, as well as the diagram for such reorganization submitted at the same time by Dr. Russell B. Bailey, of Wheeling.

The following sub-committee was named to consider a program for reorganization: Dr. Thomas L. Harris, of Parkersburg, Chairman; and Drs. Frank V. Langfitt, D. A. MacGregor, W. E. Vest, *ex officio*, and N. H. Dyer, *ex officio*.

The committee further unanimously agreed that the cancer program, including education, treatment and care, should be wholly under the state health department, and that the crippled children's program should be transferred from the department of public assistance to the state health department.

It was the expressed thought of the members present that any reorganization should provide for direct supervision and control by the state health department of every phase of public health in West Virginia, including institutional medical treatment and care.

The sub-committee will investigate every angle of the proposed new program and will confer with Governor Meadows and state and legislative officials before report is made to the joint committee.

WOMAN'S AUXILIARY ADVISORY BOARD

The following members of the West Virginia State Medical Association have been named by Dr. Thomas Bess, president, as members of the advisory board to the Woman's Auxiliary for 1948-1949:

John P. Helmick, Fairmont; W. A. Thornhill, Charleston; Elizabeth McFetridge, Shepherdstown; Frank J. Holroyd, Princeton; and E. J. Humphrey, Huntington.

The appointment of the new board was announced after the close of the annual meeting at Huntington.

BIRTH RATE UP 30 PER CENT

The birth rate in West Virginia has increased nearly thirty per cent during the past ten years, the increase being from 22.6 to 29.3 per 100,000 population. This increase will undoubtedly change the composition of the state's population. Its effect on the school population will be felt, and additional health services for children will be required.

In contrast to the increase in the birth rate, the number of deaths among children from birth to six years of age has decreased. Dr. N. H. Dyer, state health commissioner, reports that 92.5 per cent of children born in 1938 survived to school age (six years). With the decline of the death rate, a higher proportion have survived to age six. It is expected that there will be 51,000 six-year old children in 1953, approximately 11,000 more than the number of children of the age to enter school in 1947.

Reporting of births was probably not as complete from 1938 to 1942 as in the last five years. From 1943 through 1945, birth certificates were required for food ration books for infants, and during the war years, certified copies of birth certificates were required for work in war industries.

In addition to improvement in registration, a real increase in the birth rate was noted. During 1947, 54,170 birth certificates were filed, an increase of more than 6,000 over 1946 and 12,000 over 1938.

FEDERAL FUNDS EARMARKED FOR FOUR WEST VIRGINIA HOSPITALS

A hospital construction program calling for the expenditure of nearly five million dollars has been filed by the West Virginia Department of Health with the United States Public Health Service. Of this sum, $1,519,723.58 represents tentatively earmarked federal funds available under Public Law 725, enacted by the 79th Congress.

The following hospital construction projects have been placed on the schedule for participation in federal funds allocated to West Virginia under the Hill-Burton Act for the fiscal year ending June 30, 1948:

1. Webster County Memorial Hospital (new), Webster Springs; estimated cost, $300,000; eligible for federal funds in the amount of $100,000.
2. Kings Daughters Hospital (175-bed, new), Martinsburg; estimated cost, $1,361,104.45; eligible for $353,533.33 in federal funds.
3. Fairmont General Hospital (60-bed addition), Fairmont; estimated cost, $198,570.75; eligible for $66,190.25 in federal funds.
4. Memorial Hospital of Charleston (116-bed unit of a planned new 436-bed general hospital), Charleston; estimated cost, $3,000,000; federal funds tentatively earmarked, $1,000,000.

According to Dr. N. H. Dyer, state health commissioner, the State Department of Health has approved preliminary applications from Kings Daughters Hospital, of Martinsburg, and Memorial Hospital, of Charleston. Full approval has been given to Fairmont General Hospital for its new addition. Approval of the preliminary application filed by the Webster County Memorial Hospital Association is expected as soon as initial plans are completed.

VA SYPHILIS RECORDS AVAILABLE

The Veterans Administration has in its custody the majority of syphilis records of Army personnel treated for this disease while in active service, and in many instances can procure informative data from the syphilis records of other than Army personnel.

According to Dr. Paul B. Magnuson, chief medical director, doctors treating veterans for syphilis as private patients will probably find a resume of the syphilis record useful since the details of the treatment, results of spinal fluid examinations, and blood serologies are incorporated in the record. Resumes of these records are available to doctors who are treating such veterans provided authorization for the release of the data is given by the veteran. Ordinarily the resume can be furnished in approximately two weeks from the date of the receipt of the request and signed authorization.

Requests for the resumes, accompanied by an authorization for the release of the data, dated and signed by the veteran, should be addressed to the Dermatology and Syphilology Section, Veterans Administration, Munitions Building, Washington 25, D. C. It is important that the veteran's Service Serial Number and other identifying information, such as the date of enlistment, the date of discharge, rank, and organization, be included.

TWENTY WEST VIRGINIANS RECEIVE M. D. DEGREE AT MCV COMMENCEMENT

Governor Millard F. Caldwell, of Florida, delivered the address at the Medical College of Virginia commencement exercises, held June 8, at the Mosque, in Richmond. Diplomas were presented by Dr. W. T. Sanger, the president, to 86 graduates in medicine.

The following is a list of the graduates in medicine from West Virginia, with home address and hospital where internship will be served:

Barberia, Regina Margaret, Morgantown, Wheeling General Hospital, Wheeling.
Barrow, Guy Joseph, Elkins, Johnston-Willis Hospital, Richmond.
Berry, Elbert Lowell, Saint Albans, Charleston General Hospital, Charleston.
Cobb, Ernest Tinsley, Ronceverte, Johnston-Willis Hospital, Richmond.
Conn, Lee Roy Minor, Blacksville, Crawford W. Long Memorial Hospital, Atlanta.
Damron, Joseph McDonald, Huntington, Medical College of Virginia Hospital, Richmond.
Dennison, Charles William, Huntington, Cincinnati General Hospital, Cincinnati.
Edwards, Roy Alvin, Jr., Huntington, Medical College of Virginia Hospital, Richmond.
Gordon, Paul Edwin, Clarksburg, Union Memorial Hospital, Baltimore.
Greco, Robert, Morgantown, Ohio Valley General Hospital, Wheeling.
Hardman, Thomas Brock, Morgantown, Doctor's Hospital, Washington, D. C.
Hudnall, Leonard Preston, Pratt, Ohio Valley General Hospital, Wheeling.
Judy, Samuel Benjamin, Parkersburg, Stuart Circle Hospital, Richmond.
Kincaid, William Eugene, Parkersburg, Ohio Valley General Hospital, Wheeling.
Law, Nancy Pendleton, Princeton, Medical College of Virginia Hospital, Richmond.
Moore, Michael Judson, Killarney, Ohio Valley General Hospital, Wheeling.
Mullins, David Walker, Logan, United States Naval Base Hospital, Pensacola, Florida.
Nierman, William Albert, Huntington, University of Maryland Hospital, Baltimore.
Richard, Robert Earl, Morgantown, Ohio Valley General Hospital, Wheeling.
Wingfield, Robert Clark, Elkins, Gallinger Municipal Hospital, Washington, D. C.

NEW SUPERINTENDENT AT SPENCER

Dr. Edward K. Hawke, assistant superintendent at the Huntington State hospital, has been named by Governor Clarence W. Meadows, as superintendent of Spencer State hospital. He succeeds Dr. Charles E. Hamner, who tendered his resignation after serving as superintendent since April, 1947.

Doctor Hawke received his M.D. degree at the University of Virginia in 1932, and was named a member of the staff of the New Jersey State hospital, in Trenton, in 1933. From 1937 to 1942 he was engaged in private practice in Newton, New Jersey.

Doctor Hawke served as commanding officer and post surgeon of the station hospital at Fort Miles, Lewes, Delaware, during World War II. Before accepting appointment at the Huntington hospital, he was assigned to the VA regional office in that city.

The interim meeting of the American Medical Association will be held in St. Louis, November 30-December 3. 1948.

DR. MARKLEY HEADS NEW BUREAU OF HOSPITAL AND MEDICAL CARE

Dr. J. A. Markley, formerly of Morgantown, has been named director of the state health department's new bureau of hospital and medical care. The appointment was made by Dr. N. H. Dyer, state health commissioner.

A. J. Williamson, of Charleston, former superintendent of Charleston General hospital, will serve as field representative for the bureau, which has been set up under the provisions of the hospital licensing law, enacted by the legislature in 1947, which is effective July 1.

Doctor Markley has had years of experience in public health work and hospital administration. He organized Health District No. 4 in 1937 and established headquarters at Weston, where he remained until 1940 when he was placed in charge of the building equipment and staff of a hospital in the Florida Everglades. The project was under the supervision of the U. S. Department of Agriculture.

During World War II, Doctor Markley served as USPHS regional medical officer in charge of medical care for Bahamian and Jamaican imported farm laborers in the southeastern part of the country. He was later assigned to public health work in Illinois, and established the DuPage county health department at Wheaton. At the end of the war he located at Miami, Florida, where he engaged in general practice.

MENTAL HYGIENE CLINICS IN OPERATION

Two mental hygiene clinics in West Virginia have been in operation for six months, and Dr. N. H. Dyer, state health commissioner, is authority for the statement that plans for the opening of a third clinic are well under way. The exact location has not been fixed, but it is probable that it will be in the northeastern part of the state.

Under the National Mental Hygiene Act, West Virginia received a grant of $50,000, which has been utilized in the establishment and operation of mental hygiene clinics.

The first clinic was established December 1, 1947, and is located on the campus of West Virginia State College, at Institute. It is under the direction of Dr. Simon O. Johnson, psychiatrist, of Lakin. Since its opening, the clinic has been operated for use by the students and personnel of the college, as well as for community referrals. The present case load averages from 60 to 70 active cases.

The second clinic, located in Charleston, is under the direction of Dr. William B. Rossman, part-time director of the bureau of mental hygiene of the state health department. Mrs. G. H. Barksdale is attached to the clinic as psychiatric social worker, and Mrs. Betty Spencer is serving as clinic psychologist. The clinic is devoted exclusively to community referrals, and the case load is between 45 and 50 cases.

The services of both clinics are available without charge upon proper referral from social agencies, courts, schools, private physicians, and the Kanawha-Charleston Health Department.

Clinic personnel is employed full time. Clinic sessions are held only on scheduled days.

REGULATIONS ISSUED FOR OPERATION OF HOSPITALS, EFFECTIVE JULY 1

New regulations for the operation of hospitals and other institutions have been released by the state department of health. The regulations, which are effective July 1, 1948, will apply to general hospitals, tuberculosis sanatariums, mental institutions, chronic disease hospitals, and specialized hospitals, such as orthopedic, pediatric, rest homes, nursing homes and homes for alcoholics.

Approval of the state health department must be obtained in matters concerning sanitary facilities, including housekeeping, water supplies, sewage disposal, plumbing, garbage disposal, incineration and screening. A certificate of clearance must be obtained from the state fire marshal certifying that the hospital is complying with the minimum standards of fire prevention and protection. All stairways must be provided with handrails.

The following are also some of the more important regulations included in the manual distributed by the state health department:

All persons engaged in preparing or serving food in any institution must possess a health examination certificate by a physician licensed to practice medicine in West Virginia. Annual chest x-rays and semi-annual seriological examinations will be required of all institutional employees.

All persons admitted to a hospital must be under the care of a physician licensed to practice medicine in this state. Specialized hospitals must have qualified personnel, with a graduate nurse registered in West Virginia and a consulting physician being available at all times.

A segregated department for maternity patients must be maintained, and it is recommended that a special room be equipped as a delivery room. It is further recommended that a nursery be provided for the care of newborn infants, and that such room be used for this purpose exclusively.

Staff membership must be restricted to physicians and surgeons who are, (a) licensed to practice in West Virginia, or approved in accordance with the rules and regulations of the West Virginia Public Health Council; (b) competent in their respective fields; and (c) worthy in character and matters of professional ethics. In this latter connection, the practice of the division of fees under any guise whatever, is prohibited.

In all hospitals which admit two or more physicians to practice in the institution, there must be an organized staff. There must also be an organized department of nursing under competent supervision and direction of a graduate nurse registered in this state.

Each hospital must provide laboratory facilities with adequate laboratory space, equipment, and supplies. It must be under the supervision of a physician or a competent laboratory technician, and maintained in accordance with the requirements for laboratories as set up by the state department of health.

Additional copies of the registrations, which were mailed several days ago, may be obtained from the state department of health.

"...such as Metamucil..."*

For the treatment of the spastic colon the author suggests diet, elimination of the nervous element and "bulk producers." As examples of these he lists "agar-agar, in finely powdered form, in flakes, or in cereal-like form; derivatives of psyllium seed, such as Metamucil . . . . "*

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*Glafke, W. H.: Spastic Colon, M. Clin. North America 26:805 (May) 1942.

†Council on Pharmacy and Chemistry: New and Nonofficial Remedies, 1947, Philadelphia, J. P. Lippincott Company, 1947, p. 320.

Obituaries

ACHILLES S. ABSHIRE, M. D.

Dr. Achilles S. Abshire, 88, of Beckley, died in a hospital in that city, May 30, following a month's illness.

Doctor Abshire was born at Boone's Well, Franklin County, Virginia. He received his M.D. degree at Baltimore Medical College in 1891, and was licensed to practice in West Virginia immediately following his graduation. He located at Hinton, where he was engaged in practice for many years with the late Dr. O. O. Cooper. He moved to Beckley in 1900, and remained in active practice in that city until his retirement in 1938.

* * * *

WILLIAM JOSEPH LEAHY, M. D.

Dr. William Joseph Leahy, 72, of Mannington, died June 1, 1948, at a hospital in New Haven, Connecticut. He had been in failing health for several years, and some months ago retired from active practice and moved back to his old home town, Ansonia, Connecticut.

Doctor Leahy was an honor graduate at the College of Physicians and Surgeons, Baltimore, in 1899. After serving as resident at Mercy Hospital, he moved to West Virginia where he was licensed to practice in 1900. He served as radiologist at the old Cook Hospital, and for many years was director of the Hugh Carr X-Ray Laboratory.

He was always civic minded, and served as president of the Mannington Chamber of Commerce. He was one of the pioneer good roads boosters in West Virginia.

He served as captain in the Medical Corps of the Army during World War I, and helped organize the Charles Millan Post No. 40, of the American Legion, in Mannington, serving as its first commander. He was reelected seven times to this office.

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RICHMOND, VIRGINIA

Doctor Leahy served as president of the Marion County Medical Society in 1912. He was an honorary lifetime member of that society, the West Virginia State Medical Association, and the American Medical Association.

He is survived by his widow, the former Adeline Downs, of Mannington; a son, Thomas Leahy, U. S. Marines, stationed for the past two years in China; a daughter, Mary Ellen Leahy, now a student at West Virginia University; and a brother, Thomas Leahy, of Ansonia, Connecticut.

* * * *

CARL FROST RAVER, M. D.

Dr. Carl Frost Raver, 69, of Charleston, died in that city, June 11, following a year's illness.

Doctor Raver was born in Norwalk, Ohio, October 9, 1878. He received his M.D. degree at the University of Michigan Medical School in 1901, after which he taught school in Manila, Philippine Islands, until 1907, when he returned to the states. After further schooling, he was awarded degrees in chemical engineering and public health. He resumed teaching school in the middle and far west, and served as health commissioner at Mankato, Minnesota, Aberdeen, S. D., and La Salle, Illinois. He moved to Charleston in 1919 and accepted appointment as head of the vital statistics division of the state department of health, serving in that capacity until 1933.

He is survived by his widow, Mrs. Mary Raver; a daughter, Martha Raver, of Charleston; a son, Charles, of Detroit; and a sister, Mrs. David Jefferson, of Norwalk, Ohio.

THE HAND

The hand is the most exposed and most frequently injured part of the body. Economically, as a rule, when the hand of a working man is injured his means of livelihood is gone. Injuries and infections of the hand cause more loss of working time than any other single condition.—J. Indiana St. Med. Assn.

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County Society News

FORT HENRY ACADEMY

Dr. James A. Lehman, professor of surgery of the Woman's Medical College, Philadelphia, was the guest speaker at the regular monthly meeting of the Fort Henry Academy of Medicine, held May 25, at Wheeling. His subject was, "The Acute Abdomen in the Female." His paper was discussed by Drs. E. V. Arbaugh, of Martins Ferry, Ohio, and Carl S. Bickel, of Wheeling.

D. E. GREENELTCH, M. D.,
Secretary.

* * * *

KANAWHA

Dr. William Abbott, of Detroit, former associate professor of surgery at Wayne University, was the guest speaker at the regular monthly meeting of Kanawha Medical Society, held June 8 at the Daniel Boone Hotel, in Charleston. His subject was, "Parenteral Fluids." After Doctor Abbott's address, a movie on "Ganglionectomy" was shown.

At the business meeting following the scientific program, Dr. Lyle A. Moser, of Charleston, was accepted as a member by transfer from the Fayette County Medical Society.

JOHN W. HASH, M. D.,
Secretary.

MARION

At the regular monthly meeting of the Marion County Medical Society held May 25, at Fairmont, the following program committee for 1948-1949 was appointed by Dr. John P. Helmick, the president: Drs. J. P. Trach, chairman, Harry C. Fleming, Edward Vacheresse, Jr., and Joe Yost.

Drs. W. A. Welton, F. F. Sowers, and David Bressler were appointed members of the advisory board to the Woman's Auxiliary.

The Society went on record as favoring the establishment of a rheumatic fever diagnostic clinic by the Marion County Health Department.

GEORGE T. EVANS, M. D.,
Secretary.

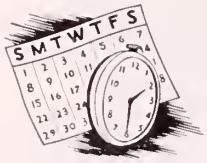
* * * *

MONONGALIA

Dr. Lucian Gregg, chairman of the Department of Medicine of the University of Pittsburgh School of Medicine, was the guest speaker at the regular monthly meeting of the Monongalia County Medical Society, held June 1, at Morgantown. His subject was, "Continued Nutritional Deficiency."

At the business meeting held prior to the scientific program, Dr. E. B. Tucker, Jr., and Dr. Dorcas Clark, of Morgantown, were elected to membership in the society. Dr. W. C. Moser, who is now living at St. Petersburg, Florida, was elected to honorary lifetime membership in the society.

The Monongalia Society will be host at the annual tri-county meeting July 8, at the Morgantown Country Club. The participating societies are Monongalia,



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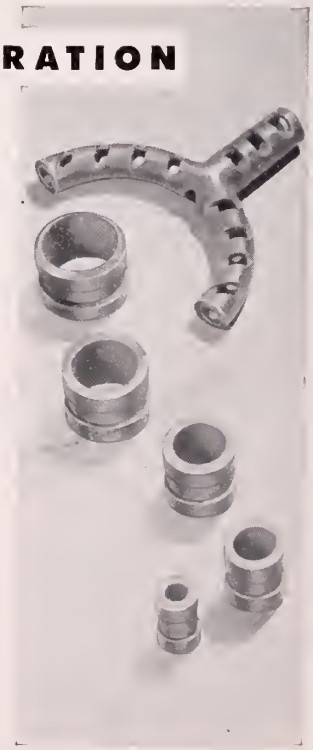

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*See Alesen, L. A.: "A Safety Factor in Gastric Resection." Surgery, XIX (1946), No. 2, pp. 220-222.

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Marion, and Harrison, but members of all component societies have been invited to attend.

CLARK K. SLEETH, M. D.,
Secretary.

* * * *

RALEIGH

Dr. Paul DeCamp, of the Ochsner Clinic, New Orleans, was the guest speaker at the regular monthly meeting of the Raleigh County Medical Society, held May 20, at the Kanawha Terrace, in Beckley. His subject was, "Clinical Significance of the Clinical Syndrome of Reduced Blood Volume."

At the business meeting following the scientific program, Dr. John A. Hedrick and Dr. Harold E. Harvey were elected to membership in the Society.

Dr. J. E. McKenzie, the president, presided at the meeting, which was attended by 42 members and guests.

W. FRED RICHMOND, M. D.,
Secretary.

Woman's Auxiliary

KANAWHA

At the regular monthly meeting of the Woman's Auxiliary to the Kanawha Medical Society, held May 5, at the Edgewood Country Club, in Charleston, officers for 1948-1949 were installed by Mrs. O. H. Bobbitt.

Annual reports were submitted by committee chairmen, and Mrs. John W. Hash, the president, appointed the following as chairmen for the new year: Public Relations, Mrs. Bert Bradford, Jr.; Legislative, Mrs. R. L. Anderson; Hygeia, Mrs. Marion Jarrett; Exhibits, Mrs. J. E. Rucker; Parliamentarian, Mrs. W. E. Hoffman; Visiting, Mrs. T. P. Mantz; Auditing, Mrs. Paul Elkin; Speakers Bureau, Mrs. John Condry; Historian, Mrs. A. C. Chandler; Bulletin, Mrs. V. L. Peterson; and Special Projects, Mrs. U. G. McClure.

MRS. JACK BASMAN,
Corresponding Secretary.

* * * *

PARKERSBURG ACADEMY

Mrs. Dana T. Moore, president elect of the Woman's Auxiliary to the West Virginia State Medical Association, and Mrs. Charles L. Goodhand, who has been named state press and publicity chairman, were presented in their official capacities, at a meeting of the Woman's Auxiliary to the Parkersburg Academy of Medicine June 1, in the Blennerhassett room of the Chancellor hotel, at Parkersburg. Mrs. F. L. Blair and Mrs. Holmes Blair were hostesses for the luncheon.

Mrs. A. Morgan Dearman, the new president, named standing committees for 1948-1949, and a full report was made concerning the annual meeting at Huntington, where the Parkersburg Auxiliary tied with the Ohio County Auxiliary for first prize for credits and awards.

Mrs. Charles L. Goodhand presided at the luncheon, which was attended by 31 members and guests.

MRS. ATHEY R. LUTZ,
Corresponding Secretary.

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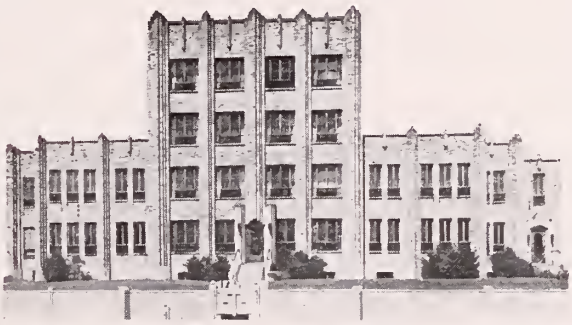

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Book Reviews

THE INTERNAL FIXATION OF FRACTURES—By Charles S. Venable, M. D., and Walter G. Stuck, M. D. Pp. 241. Charles C. Thomas, Publisher, Springfield, Illinois. Price $5.50.

The authors have written a very readable account of the various means used in the internal fixation of fractures, from the earliest times up to the present.

A complete description is given of all of the metals used at various times in the past in the treatment of fractures.

Drs. Venable and Stuck did the experimental work necessary to show that the alloy "Vitallium" is inert in tissues and therefore much superior to any other metal in open reduction of fractures. Vitallium does not become corroded and the screws do not loosen, in the absence of infection, as do screws made of any of the various types of steel. This early work appeared in 1936, and has been substantiated by many other men working in the field. The only drawback to the use of Vitallium, and it is not a great one, is that the alloy is somewhat brittle, and Vitallium plates have broken at times, when the stress was insufficient to break a steel plate. Vitallium also has to be cast, and wires cannot be made from it.

A full discussion is given of the newer types of stainless steel now in common use in bone surgery. It is said that 19-9 stainless steel and S. M O — 18-8 stainless steel are good, but inferior to Vitallium in several ways.

The technique of internal fixation is described in detail, and two helpful chapters are given on the treatment of fractures of the upper and lower extremities.

The book is exceptionally well written, there being extensive bibliographies at the ends of the chapters. It can be recommended without reservation to all those interested in the treatment of fractures.—H. A. Swart, M. D.

* * * *

SUCCESSFUL MARRIAGE—Edited by Morris Fishbein, M. D., and Ernest W. Burgess, Ph. D. Pp. 515, with 16 illustrations. Doubleday & Co., Inc., Garden City, N. Y. 1917. Price, $2.00.

This book is a fairly successful attempt to cover the whole field of the marriage relationship, including courtship and other premarital behavior, anatomy, physiology, and psychology of sex, cost of getting married, the honeymoon, division of labor in the home, spending the family income, extramarital relationships, divorce, the climacteric, prostitution, venereal disease, and goodness knows what else. Incidentally, the data on the cost of a simple home or church wedding are calculated to cause many couples to run, not walk, to the nearest justice of the peace. This is probably desirable.

Around three dozen authors, all authorities in their fields, have contributed to the book. The multiplicity of viewpoints at times gives the material a curiously disjointed effect which is apparently unavoidable in this type of presentation. This is particularly trying if one

attempts to read the whole thing in a short space of time.

But the facts and opinions are intelligently and frankly presented, and the treatment is very thorough. It is a valuable book for couples contemplating marriage, and for many who are already married. The fact that it covers the same ground that several other books previously published have explored does not detract from its worth.—David W. Northup, Ph. D.

* * * *

ENJOY YOUR CHILD—AGES 1, 2, AND 3—By James L. Hymes, Jr., M. D. Pamphlet No. 141 in the series of 20-cent pamphlets issued by the Public Affairs Committee, Inc., 22 E. 38th St., New York, N. Y.

The foundations for good human relations are built in a child's early years when he first seeks feelings of success, achievement, and confidence, Dr. James L. Hymes, Jr. asserts in this Public Affairs Pamphlet issued early in June.

Dr. Hymes, who is Professor of Education and Coordinator of Early Childhood Education at the State Teachers College, New Paltz, New York, advises parents that if they are sensitive to the young child's two major ambitions, for independence and for security, they will not have much difficulty in finding the right way to help him.

Wanting his own way, wanting to explore and discover are the one-, two-, and three-year-old's way of seeking power—power over himself, over people, and over things — according to Dr. Hymes' handbook. Parents need not be afraid, however, that this means that the child will grow up to be a brute. "It means confidence in himself, a healthy sureness," Dr. Hymes declares.

In his exploration, the young child is going to break things. "Step Number One," Dr. Hymes suggests, "is to decide for yourself what breakage you can take with a smile and what would simply break your heart. . . . Remember that children cost money. You will get what you pay for. And you have to be willing to spend some money if you want to build a sense of independence, curiosity, and a vigorous investigating spirit."

Dr. Hymes suggests that the parent "remove the most precious things" and "make sure that your youngster has lots of things of his own that he can touch and bang and pile and lug."

All children go through the stage of saying NO, Dr. Hymes reminds the parent. Children test their power this way, but as a rule they get over it. It is part of the child's search for independence.

In addition to grinning and bearing it while it lasts, the parent is given three helpful tips by Dr. Hymes: Don't wait till the last minute, when something has to be done. Stay away from questions, which are an open invitation to a NO. And the less talking the better, for children of one, two, and three respond better to what you do than to what you say.

Dr. Hymes tells parents that they can try to meet their children's legitimate needs without fear of spoiling them. "Many children who are spoiled," he says,

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REFERENCES

AVAILABLE FOR GENERAL PRACTICE—Office on Quarrier Street, in Charleston. Three rooms, ground floor, remodeled office building. Owner leaving in September on account of poor health. Address Box M-1, West Virginia Medical Journal, Box 1031, Charleston 24, West Virginia.

OFFICES AVAILABLE—Second floor, 1113 Quarrier Street, Charleston. Space for three physicians. Address L-1, West Virginia Medical Journal, Box 1031, Charleston 24, West Virginia.

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"got not too much of what they wanted, but too little. Severe disappointments or too many of them seem to block growth." The normal growth of other children is blocked in a different way. They "are held and fondled, not when they want affection, but when the adult wants to give it to them. They are helped, not when they ask for help, but when the adult wants to give it to them."

Parents are advised never to threaten to take away their love as a punishment. "It is too severe a threat for your child to take," says the author, who also believes in steering away from all severe forms of punishment. "If you tell a youngster too often that he is bad or naughty, he can come to feel that he has lost your love. And once that happens he has lost his most important reason for wanting to be good."

For his own security, however, the child expects his parents to set rules, standards, and limits. But the parent should adjust his demands to what a younster can reasonably be expected to do.

Last but not least, in order to develop their understanding, parents are urged to work with other parents, to seek the help of doctors, dentists, and skilled teachers, and to use the knowledge that can be obtained from newspapers, magazines, pamphlets, and books.

The word "facetious" is the only word in the English language that contains all the vowels in their alphabetical order. It has no place in your replies to a patient who comes to you fearful of a cancer.—J. Michigan St. Med. Soc.

Correspondence

SECURITIES AND EXCHANGE COMMISSION*
Washington 25, D. C.

May 21, 1948

Mr. Charles Lively, Executive Secretary
West Virginia State Medical Association
Charleston, West Virginia

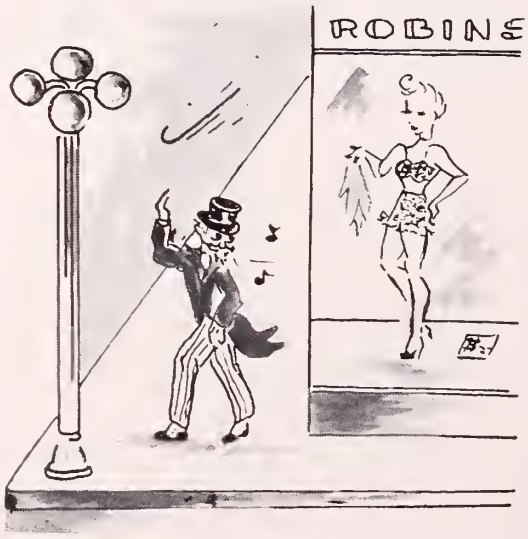
Dear Mr. Lively:

I have your letter of May 6, 1948 with reference to the above companies. . . .

These companies are not registered with this Commission and such solicitations to residents of this country are in violation of the federal statutes. These are only two out of over 200 Toronto companies illegally selling securities to our citizens, and the situation has been of serious concern to us for a long time. The Canadian courts have held that the present extradition treaty between the United States and Canada does not cover violations of the securities laws. Consequently, although such offerings are illegal, we have been unable to reach the violators in Canada. Dealers and promoters are able with impunity to obtain money from our citizens by the use of the mails and long distance telephones so long as they remain on the other side of the border while engaging in their unlawful activities.

More than seven years ago this Commission brought

* See editorial, "Beware Strange Voices," this issue.



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the situation to the attention of our State Department, which, in conference with the Canadian authorities, prepared a new treaty to cover such offenses. That treaty was ratified by the United States Senate on May 27, 1942, but formidable opposition has prevented its ratification by the Canadian Parliament. Until this is done, it will continue to be difficult and at times impossible for our Government adequately to punish violators of our statutes.

When we are successful in apprehending such persons in this country we can take appropriate action as is indicated by the convictions obtained in Detroit which are described in the enclosed release.

We have made no complete investigation of this company and I am unable therefore to give you any specific information concerning it. I can tell you, however, that in every instance in which we have investigated the activities of a Canadian company selling securities in this country without registration, we have found such sales to be grossly fraudulent.

Your members can be of material assistance to us if they will forward to me any further literature of this nature that they receive from Canada. Moreover, it is not unlikely that Canadian promoters or salesmen may risk an occasional trip into this country in an effort to promote their ventures by personal solicitation. Should they at any time receive information that any representative of these companies (or of any other Canadian company or dealer who has offered or sold securities to residents of the United States) is in this country, I will appreciate their informing me immediately.

I appreciate your interest in bringing the matter to our attention and assure you that we are exhausting every possibility in an attempt to correct the situation.

Very truly yours,

Edward H. Cashion
Chief Counsel

DR. McCLINTIC NAMED CONSERVATION HEAD

Dr. C. F. McClintic, of Williamsburg, has been named by Governor Clarence W. Meadows, as director of conservation, succeeding Jack K. Shipman, of Mullens, resigned. The appointment was effective June 1.

Doctor McClintic has long been interested in the conservation program in West Virginia. He was active in the organization of the Affiliated Sportsmen's Association, serving as its first vice president. He has also served as head of the Wild Life League of West Virginia.

After completing two terms as a member of the House of Delegates from Greenbrier county, he served as warden of the penitentiary at Moundsville from 1933 to 1937. In 1941, he was appointed state health commissioner by Governor M. M. Neely, serving in that capacity until 1933.

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OBSTETRICS—Intensive Course, Two Weeks, Starting September 27, October 25.

UROLOGY—Intensive Course, Two Weeks, Starting September 27.

MEDICINE—Intensive Course, Two Weeks, Starting October 11.
Personal Course in Gastroscopy, Two Weeks Starting July 12, September 27.
Electrocardiography & Heart Disease, Two Weeks, Starting August 2.
Electrocardiography & Heart Disease, Four Weeks, Starting September 13.

DERMATOLOGY—Formal Course, Two weeks, Starting October 4.
Clinical Course Every Two Weeks.

OPHTHALMOLOGY—Intensive Course, Two Weeks, Starting September 20.
Refraction Methods, Four Weeks, Starting October 11.
Ocular Fundus Diseases, One Week, Starting November 15.

OTOLARYNGOLOGY—Intensive Course, Two Weeks, Starting October 18.

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Vol. XLIV AUGUST, 1948 No. 8

SOME LIMITATIONS OF ELECTRO-CARDIOGRAPHY

By W. C. STEWART, M. D.,
Charleston, West Virginia

The most serious deterrent to the widespread use of the electrocardiograph has been the difficulty in maintenance and operation of the machine. In the past, trying problems often arose in its operation. However, numerous electrocardiographs are now available which are not only compact and portable, but can double as attractive pieces of office furniture. They are nearly foolproof and their operation may be accomplished after an hour's instruction. The availability of the electrocardiograph and the simplicity of its operation make its increasing use inevitable and justify a consideration of the limitations of this method of cardiac examination. Improvement in the mechanical efficiency of the machine does not lessen the necessity for great care in the evaluation of the tracings made. Some of the most serious cardiac conditions cannot be detected by the electrocardiograph and normal individuals may show changes in their electrocardiogram which appear to represent an abnormality unless the limits of normal are thoroughly appreciated. Without any reflection on the admitted merits of electrocardiography, it is yet fair to say that unless the physician is familiar with its shortcomings he may often be misled and at times sorely disappointed.

Present concepts of electrocardiography are based on research and the critical analysis of a large volume of clinical material. Studies on the single cell, on the isolated muscle strip, and the intact animal have been used extensively for the study of the basic principles involved. Necropsy findings have been a rich source of information and comparative analysis of pathologic data with electrocardiograms made during life has been a very productive method of investigation. Reports of these studies have formed the basis of present day electrocardiography. It is not surprising, however, that the deficiencies of electrocardiography have not received as much emphasis as have its rich accomplishments.

The proper evaluation of an abnormal electrocardiogram necessitates familiarity with a normal tracing. This is not as simple as it might appear to be. Graybiel and others[1] reviewed the electrotrocardiograms of 1,000 young healthy aviators who had no cardiac defects on physical or x-ray examination. They found 16 cases in which the PR interval was greater than 0.20 of a second and 38 cases in which the QRS complex was greater than 0.10 of a second. This study also revealed other departures from the accepted standards for normal. These findings were not considered by them to have been due to unrecognized heart disease. Stewart and Manning,[2] in a study of 500 aviators found a similar incidence of departures from the accepted standards for normal. Numerous other studies also have indicated a considerable variation in the range of the normal electrocardiogram. It appears that if the present standards for normal be rigidly adhered to, a significant number of electrocardiograms of young, healthy persons may be improperly interpreted as indicating heart disease. This condition constitutes an appreciable limitation in the value of electrocardiogram.

In cases of congenital heart disease the electrocardiogram may at times be quite helpful.

The familiar pattern of right axis deviation with very high voltage and usually with tachycardia is now generally well recognized. However, the commoner forms of congenital heart disease such as patent interventricular septal defect and patent ductus arteriosus present no consistent pattern in the electrocardiogram. In these conditions the electrocardiogram is most often normal.

Abnormal electrocardiograms have been found in numerous cases of infection and in toxic conditions in which myocarditis may occur. While rheumatic fever is the disease most often producing changes in the electrocardiogram, hemolytic streptococcic sore throat, scarlet fever, diphtheria, trichinosis, scrub typhus, infectious mononucleosis and various virus infections often produce electrocardiographic changes. Almost any infectious disease may upon occasion be accompanied by myocarditis. The changes noted usually have been prolongation of the PR interval, T wave flattening or inversion and deviation of the ST segment from the isoelectric line. The decision as to the limits of normal has remained a problem in studies involving electrocardiographic changes in myocarditis.

Spink,[3] in a review of 18 cases of trichinosis, found six which showed electrocardiographic changes. Beecher and Amidon[4] studied 44 cases in an epidemic of trichinosis but found only two showing abnormal tracings. They noted that the diagnosis of myocardial damage, made by means of the electrocardiogram, is subject to differences of opinion. Hollander[5] found electrocardiographic abnormalities in 73 per cent of 78 cases of scrub typus studied, but indicated that rigid criteria defining the normal were employed. Rosenberg[6] found electrocardiographic evidence of myocardial involvement in 16 cases of mumps in a total of 104 consecutive cases studied. In the majority of these cases the abnormal tracings were found on the eighth or ninth day of the illness and were very transient. Streptococcal infections have been notorious for the frequency with which they produce myocardial involvement. Rantz, Spink and Boisvert[7] have reported a notable study on the electrocardiographic abnormalities following hemolytic streptococcic sore throat. In a detailed study of 185 patients with acute hemolytic streptococcic disease of the respiratory tract some cases having arthritic manifestations and appearing indistinguishable from rheumatic fever they found 31 cases showing definite electrocardiographic abnormality. They employed rigid criteria in determining abnormality in order to avoid controversy. Bruenn[8] reviewed the literature and concluded that about 30 per cent of all cases of acute rheumatic fever show some abnormality of the PR interval during the disease. Manchester[9] studied 113 cases of rheumatic fever in naval personnel and found that 26 per cent showed abnormal electrocardiograms. Reyersbach and Kuttner[10] studied the PR interval in 140 children who had had rheumatic fever and were convalescent without signs of rheumatic activity. They found that 5.7 per cent of these children had a PR interval of 0.20 of a second or more. In a control study of 150 normal girls they found 5 per cent with a PR interval prolonged to 0.19 of a second or more. They concluded that in the absence of other abnormalities the clinical significance of an increase in the PR interval in rheumatic children is doubtful. They pointed out also that spontaneous variation in the A-V conduction time of normal individuals has been frequently reported.

It appears that myocarditis frequently produces changes in the electrocardiogram but considerable difficulty arises in determining the limits of normal variation and the points at which the abnormal begins. The changes may be transient and found only if serial tracings are made. In rheumatic fever the electrocardiogram will be abnormal at some time during the disease in about 30 per cent of cases. Therefore, it may be concluded that the electrocardiographic changes usually associated with myocarditis must be evaluated very cautiously and while they are of considerable diagnostic aid, if present, a normal tracing can by no means serve as an exclusion test.

The electrocardiogram has been used extensively for determining preponderance of the ventricular chambers and the presence of cardiac enlargement. Criteria for right and left axis deviation and the ventricular preponderance which is usually assumed to be present are fairly well standardizd. They are concerned primarily with the direction of the electrical axis of the QRS complexes and secondarily with deviation of the ST segment and flattening or inversion of the T waves. Many factors should be considered when evaluating the direction of the electrical axis of the QRS complex. The position of the heart in the chest is of great importance. A shift of the heart to the left as in cases of fluid in the right chest, right pneumothorax or in deformity of the chest tends to produce right axis deviation. If the heart is pushed to the right, left axis deviation is apt to result. The position of the diaphragm is also of great importance as witnessed by the well known effect on lead III, produced by a deep inspiration. A low dia-

phragm and a vertical heart are usually associated with rotation of the heart to the right and right axis deviation, whereas a high diaphragm and a horizontal heart usually are associated with rotation of the heart to the left and left axis deviation. Sigler[11] studied the effect of position of the patient on the electrocardiogram and found that changing from the sitting to the recumbent position had a profound effect upon the QRS complex and upon the T wave. Myers, Klein and Stofer,[12] as well as numerous others, have observed this also. Graybiel and his colleagues[1] found 51 instances of left axis deviation and 22 instances of right axis deviation in 1,000 normal young men. They found also T inverted in lead III in 20 per cent of these cases. Gubner and Ungerleider[13] consider that the left axis deviation occurring with left ventricular hypertrophy in hypertension is due largely to obesity and transverse position of the heart. They believe that left axis deviation is not often observed in slender subjects with left ventricular hypertrophy. Goldberger,[14] in a study of axis deviation in ventricular hypertrophy, found that the position of the heart had more to do with deviation of the electrical axis of the QRS complex than did ventricular hypertrophy. He depreciated the value of the standard limb leads in determining ventricular hypertrophy. Myers, Klein and Stofer[12] have reported their observations in an excellent study of right ventricular hypertrophy in cases coming to autopsy. They point out that there is as yet no general agreement as to the value of the electrocardiogram in the diagnosis of right ventricular preponderance. In a unique demonstration they showed the electrocardiograms of 12 patients arranged in groups of three. Autopsy showed the presence of a normal heart in one, right ventricular hypertrophy in another, and left ventricular hypertrophy in a third. From a study of the tracings in the three cases it would be impossible to identify the respective electrocardiograms. Myers believes that precordial unipolar electrocardiagrams may be very helpful in the diagnosis of right ventricular hypertrophy, and this is the belief of Goldberger[15] also. In this type of tracing and particularly in the augmented extremity leads, the effect of position of the heart is not so confusing as it is in the standard limb leads.

It is fair to say that while the use of standard limb leads in determining right or left ventricular hypertrophy often is a helpful study, it is subject to many sources of error. Deviation of the electrical axis of the QRS complex, even if associated with ST segment and T wave changes, is influenced more by the position of the heart than by the pathology in the heart.

The greatest interest in cardiology today is in disease of the coronary arteries and the myocardial changes secondary to this disease. The electrocardiograph may achieve brilliant success or dismal failure as a diagnostic aid in the study of coronary artery disease. Sprague[15] made some appropriate comments in this connection several years ago when he wrote, "in a population like that of the United States, the average age of whose components is continuously increasing, methods to discover premature senility become popular. The electrocardiograph is a peculiarly appealing instrument as it is commonly supposed to possess a prescience in the discovery of coronary pathology superior to any other technique." He then pointed out the limitations of the electrocardiograph in this direction and his paper dealt chiefly with the existence of normal electrocardiograms in the presence of coronary disease.

It is a frequent experience to find a normal electrocardiogram in a patient with typical manifestations of angina pectoris. This is not surprising in view of the fact that the electrocardiograph may depict abnormal electrical phenomena resulting from disease of the conduction system or myocardium but does not reveal an alteration in cases of coronary sclerosis or even coronary occlusion unless there is associated myocardial infarction or fibrosis. The electrocardiograph cannot be expected to assist in the diagnosis of coronary sclerosis unless there are associated myocardial changes. A further limitation of the usefulness of the electrocardiograph lies in the fact that if myocardial infarction has occurred the tracing may yet be normal. This may be true during the first hours following coronary occlusion and myocardial infarction. Electrocardiograms made at this time may be entirely normal and may not develop characteristic changes for twenty-four to forty-eight hours. At the other extreme, it is a common experience in making serial electrocardiograms after a myocardial infarction to find the tracing return entirely to normal. Numerous cases coming to postmortem examination show widespread coronary artery disease with one or more myocardial infarctions, having shown normal electrocardiograms before death.

In approaching the problem of the electrocardiographic diagnosis of coronary artery disease from a different viewpoint, consideration should be given to the usual diagnostic features of the tracing in this condition. Coronary artery disease and the acute or chronic myocardial changes

which may be associated with it produce QRS changes, particularly involving the Q wave, ST segment and T wave changes. Q wave abnormalities, usually indicative of muscle death of a localized nature as in myocardial infarction, may develop in lead I but only occasionally. A Q wave frequently develops in lead III but this lead is notoriously susceptible to changes depending upon cardiac position and must be cautiously evaluated. Q3, to be of proven significance, not only must be accompanied by T wave changes in lead III but should be supported by Q wave and T wave changes in lead II or, better still, by significant changes in the augmented V limb leads as done by Goldberger.[16] Changes in the ST segment are characteristically transient and may be missed by a single tracing. Also, the ST segment is altered by numerous influences other than coronary artery disease and its associated myocardial changes. Sprague[16] listed a large number of conditions which may cause abnormalities of the ST segment and often also of the T wave. These include digitalis, myocarditis from any cause, pericardities, various toxemias and metabolic disorders such as uremia, diabetic acidosis, hypocalcemia, and hypothyroidism. Important also as previously noted is the position of the heart and in addition, axis deviation, paroxysmal rapid heart action, pulmonary embolism and numerous other infrequent causes for abnormalities of the ST segment and T wave. Unless the electrocardiographic findings indicate a serious degree of myocardial change, the foregoing conditions must be considered and excluded before the significance of the ST segment and T wave changes can be determined.

To recapitulate, the electrocardiograph in disease of the coronary arteries has definite limitations. The tracing often is normal when the patient's symptoms are incapacitating. This may be true when coronary sclerosis and coronary insufficiency are present without associated myocardial changes but in addition may occur in the presence of extensive myocardial infarction. The electrocardiographic abnormalities usually indicative of myocardial changes due to coronary artery disease may be produced in whole or in part by the effect on the heart of a wide variety of infections, drugs, metabolic disorders or by the position of the heart in relation to the chest wall and diaphragm.

SUMMARY AND CONCLUSIONS

The normal limits of the electrocardiograph are subject to frequent exceptions. This is particularly true as regards the conduction times of the PR interval and the QRS complex. Abnormalities of the electrocardiogram must always be evaluated with this in mind.

The electrocardiograph is of assistance in only a small percentage of cases of congenital heart disease.

In diseases often accompanied by myocarditis the electrocardiogram may be of diagnostic assistance but usually will be found normal. In rheumatic fever in which myocardial involvement is presumed to be invariably present, the electrocardiagram may show significant changes in only 30 per cent of cases.

Determination of the electrical axis of the QRS complex and conclusions as to ventricular hypertrophy may at times be helpful but are subject to many possible errors. This method of determining cardiac hypertrophy necessitates familiarity with numerous variable factors and even in the most experienced hands is of limited value.

In coronary artery disease the electrocardiograph may at times provide crucial information but in this condition its limitations are at times very apparent. Coronary sclerosis without associated myocardial degeneration cannot be detected by the electrocardiograph. The electrocardiogram may return to normal after myocardial infarction and tracings made before death may show no abnormality; unless previous tracings have been made and are available the presence of the normal tracing may be very misleading.

The electrocardiogram is influenced to a considerable extent by the position of the heart. Almost any component of the tracing may be influenced by this factor. The electrocardiogram may be influenced also by various drugs, metabolic disorders and toxic conditions. These conditions or agents may produce changes in the tracing similar in all or many respects to those produced by heart disease.

The considerations just mentioned represent limitations in the value of the electrocardiograph as a method of cardiac examination and diagnosis. Firm believers in the virtues of the instrument will not be discouraged but the unwary may be warned. Making an electrocardiogram may impress the patient but do him no good unless it can be properly evaluated. Two electrocardiograms made at appropriate intervals are always better than one, but neither one nor two relieves the physician from the necessity of a careful history plus examination by all other available methods.

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MEDICAL PUBLIC RELATIONS

Distribution of medical care still leaves some things to be desired. At times the public becomes exasperated because it can't secure a physician at night or in an emergency. Many county medical societies have recognized the desirability of correcting this error and have established a telephone exchange, or utilized the hospital in smaller communities, as a clearing station where a patient can secure a physician when his own doctor is not available. It is true that many requests are not real emergencies, yet there are times when emergency medical care is essential and the medical profession has the responsibility of furnishing that service.—Cleon A. Nafe, M. D., in J. Indiana State Medical Association.

PROTEIN — ITS IMPORTANCE IN NUTRITION OF PREGNANCY*

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The subject of nutrition is one which many of us are guilty of treating with neglect. This may be true because of the relative dryness of this phase of medicine, or because it is one that does not lend itself well to exact scientific study with the cause and effect relationships that some of us demand. However, it is my belief that the reason lies in the fact that most of us fail to recognize the importance of the subject. If there is any one aspect of medical science that should be borne in mind when seeing and prescribing for a patient, it is the subject of nutrition.

Proper nutrition for an individual implies that he receives a suitable mixture of all substances necessary for health. These substances are obtained from properly selected foods which are adequately prepared and processed, consumed, absorbed and utilized to furnish the essential nutrients. Such a diet must contain protein, fat, carbohydrate, certain minerals and vitamins, and water in optimum amounts. Optimum allowance should be much greater than the minimum requirement for each nutrient, so that provision is made for variations from normal, both in health and in disease. If any one nutrient can be singled out as being most important, I believe protein to be the one, and particularly do I believe this to be true in pregnancy.

Proteins are the principal nitrogenous elements of all plant and animal tissue. They form the essential constituents of protoplasm and the cell nucleus, and are the main organic substances of muscle and glandular tissue. They are important in osmotic relationships between intracellular and extracellular fluid, and the protein substances known as enzymes are responsible for many bodily functions.

Chemically, proteins are large complex molecules consisting of amino acids linked together, which are broken down by digestion to polypeptides and ultimately into their component amino acids which are absorbed and enter the portal and general circulation. Depending upon the state of an individual's nutrition, a part of the amino acids is used for replacing and building body and plasma protein, and the remainder is deaminated, chiefly by the liver, with the formation of carbohydrate and the production of nonprotein nitrogenous products which are excreted by the kidneys. About one-half of the amino acid

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molecules after deaminization are changed to carbohydrates.

Plasma proteins are of at least two varieties, the albumins and the globulins, chiefly distinguishable by the former's greater solubility in water. The globulin fractions are several and are concerned mainly with specific physiologic functions, such as the clotting of blood and immunity. The globulin fractions exert less than one-fifth of the osmotic effect of albumin, and it is not usual for these fractions to be altered significantly with changes in protein nutrition.

Albumin is the plasma protein which first becomes reduced in protein deficiency, and is therefore more important in our discussion. Likewise, in plasma protein loss, such as into exudates or into the urine, it is albumin which is most affected. Thus, severe depletion of body proteins eventually may be reflected in the blood by a fall in the plasma albumin concentration; however, this occurs only after a pronounced loss of body protein. The critical level of plasma albumin below which edema usually occurs is given by Bruckman and Peters as 3 per cent. Certain conditions (such as anemia), however, may modify this level as it is well known that edema may occur with higher concentration.

Nitrogen balance is a commonly used term and means that the nitrogen intake is equal to the nitrogen output over a period of several days. Nitrogen output is chiefly in the urine and stool; however, loss due to wounds and suppurating lesions must at times be considered. Negative nitrogen balance exists when excretion is greater than the amount consumed. In the absence of extensive loss of protein or incomplete absorption, this usually means that ingestion has been inadequate. A positive nitrogen balance is just the opposite, that is, a greater intake than excretion of nitrogen. This is seen in the presence of an adequate diet during such periods as active growth, and also after periods of body protein depletion, indicating that building of body tissue is taking place.

Another frequently encountered term is 'essential amino acid', which is applied to those amino acids that cannot be made in the body, and have to be ingested as such. It also implies the fact that this amino acid is required for some specific body need. The exact requirement for each amino acid is not known, thus the necessity of increasing the ingestion of good quality protein above the known minimum requirements.

The adage that a pregnant woman must 'eat for two' may not be true quantitatively, but is true qualitatively, and does express the increased nutritional demands of the individual during pregnancy. It is an incontestable fact that a pregnant woman differs from other women in her protein needs. To the basic need of the nonpregnant woman is added the demands of an increased metabolism, the storage of nitrogen, growth of the woman's body, increased needs for fetal growth and repair, growth of mammary tissue and the hormonal preparation for lactation. If 1 Gm. of protein per kilogram of body weight per day is accepted as the ordinary adult need, then authorities agree that particularly during the latter half of pregnancy the amount should be increased to 1½ Gm. to meet the increased demands. The Food and Nutrition Board of the National Research Council suggests 85 Gm. for the normal pregnant woman, and 100 Gm. for the lactating woman. These amounts presuppose a previously normal nutritional status, and if this be not true, then even larger amounts should be taken.

In spite of the fact that foods containing good quality proteins are abundant in this land of plenty, surveys show that the majority of people do not adhere to diets which meet the requirements just laid down. Perhaps most follow a diet which would meet very mimimum needs, but desirable levels are seldom obtained. In a group of 514 pregnant women in Philadelphia, the average daily intake of proteins per woman was 66 Gm. The group was characteristic since Burke, Tompkins, Leamy, Arnell, and others have shown similar defects. It was found that 92.7 per cent of these women showed less than the recommended allowance of 1½ Gm. per kilogram daily. Burke found that in Boston 19 per cent of a group of pregnant women were receiving a good protein diet, and Ebbs in Toronto found 24 per cent so cared for. Reasons for these deficiences were found to be economic, habit and custom, actual or supposed idiosyncrasies, erroneous advice, and ignorance. These groups of patients are representative of the population as a whole, and although deficiencies are found to be somewhat less in higher income groups, the problem is just as great.

Protein is obtained by an individual from food, and unfortunately only relatively few foods are sources of good protein. The nutritional quality of any food is dependent on its content of amino acids, particularly those that are essential. Generally speaking, proteins of animal origin which are found not only in meat of muscle and glandular tissue, but also in dairy products such as milk, cottage cheese, eggs, fowl, and fish, are of

higher nutritional value than the commonly used vegetable proteins, since the former are 'complete,' that is, they contain all of the essential amino acids. However, vegetable proteins supply many of the essential amino acids, and in properly selected diets may supplement one another, resulting in adequate protein ingestion. It is thought that about 66 per cent of the pregnant woman's protein intake should be of animal origin for the aforementioned reasons. The remainder is supplied by vegetables, and nuts such as peanuts and cashews, and legumes, especially soy beans and dried peas, and from bread and cereals of whole grain, particularly wheat. The vegetable proteins are inadequate sources of certain amino acids, and while they cannot replace entirely those of animal origin, they should be used not only as an accessory source of protein, but to supply other essential food factors which they contain. This presentation is primarily concerned with protein nutrition and therefore methods of administration of certain commercially prepared hydrolysates and concentrates, by mouth and parenterally, will not be considered.

It has been only recently that many reports have appeared in the obstetric literature concerning our subject, and only very recently have a number of carefully controlled series of cases been reported, showing results obtained in groups of obstetric patients on known amounts of protein intake. The results obtained and the conclusions drawn vary considerably in each report; however, all agree, in principle at least, that adequate protein intake is important in producing more uncomplicated pregnancies and more healthy infants.

One of the main things that has been noted is the relative infrequency of the development of the specific toxemias of pregnancy in the groups of patients receiving optimum amounts of protein in their diets. In two groups of women studied by Tompkins, a control group on a diet of their own choosing, and a study group receiving a diet well balanced and with a content of 110 Gm. of protein, it was noted that toxemias and mild hypertension were four times more frequent in the control group. Edema was five times more frequent, and preeclampsia eight times more frequent. Holmes observed the clinical results in 1,400 pregnant women. The protein intake of one group ranged from 60 to 70 Gm. daily and of the other group from 110 to 120 Gm. daily. He found that the incidence of toxemia, using as a criterion a blood pressure of at least 140 systolic and 85 diastolic irrespective of albuminuria, was twice as frequent in the low protein group. Arnell and his associates noticed considerable evidence that pointed to a close relationship between protein metabolism and the specific toxemias of pregnancy, and their experience was that the patient consuming adequate protein is not only less likely to suffer toxemia, but is more amenable to treatment if such develops. Dietary investigations carried out in 62 cases of eclampsia definitely suggested that protein deficiency may be of significance in its causation. Not one of the 62 patients had an optimum protein intake, and only three had intakes in the last trimester above the actual deficiency level.

Ross, of Duke University, in a comparatively recent address entitled, "Late Toxemias of Pregnancy: The Number One Obstetrical Problem in the South" makes these statements: "On checking the localities from which our toxemia patients have been referred, and on receiving the state morbidity and mortality statistics, we have found that in the same areas in which eclampsia occurred most often, we were likely to find a large percentage of pellagra and similar diseases. The energy-producing elements are adequate as a whole, but there is a protein deficiency. The animal protein consists chiefly of pork, which varies with the season. The largest proportion, estimated as 70 per cent, of the protein in the diet was furnished by the cereals, and only approximatly 30 per cent by meats, milk, and eggs. It is conceivable that while the total amount of protein was adequate, the quality of the protein, or the quantity of the type best suited for replacement of maternal tissue and blood proteins, was not entirely adequate. This possibility was borne out by the discovery of the relatively low plasma protein values. Also, on the basis of our knowledge of the group of the population from which most of the patients come, the dietary was very likely deficient both in quantity and in quality."

It is not generally thought, however, that hypoproteinemia is the cause of toxemia or that the amount of edema in toxemia can in any way be correlated with plasma protein levels. Dieckmann found only 16 per cent of preeclamptic and 12 per cent of eclamptic women with protein concentrations at the edema level, or lower. The school of thought holding that high protein diets cause toxemias of pregnancy has lost ground as the result of controlled clinical experience. It now is reasonably sure that women with liberal intakes of protein seldom suffers the specific toxemias of pregnancy, although it seems that other unknown factors must be present for their

development. The facts now prove erroneous the custom still prevalent in many quarters, that of restricting protein in the treatment of toxic patients.

Anemias of various types and degrees are frequent during pregnancy. Bethel, Gardiner, and McKinnon have described as a dietary deficiency anemia one in which the red blood cell count is below 3.5 million per cubic millimeter, and in which the volume index is above 1.1, as contrasted with an iron deficiency type of anemia in pregnancy in which the hemoglobin falls below 10 Gm. per hundred cubic centimeters with a lowered mean corpuscular hemoglobin and a color index below 0.9. Such an anemia associated with an inadequate food intake is regarded as a true macrocytic anemia, and in its more serious manifestations it is probably identical with the so-called pernicious anemia of pregnancy. Bethel and his associates found no such anemia when the daily intake of animal protein was above 50 Gm., but the incidence rose rapidly with the increasing deficiency of animal protein, and reached 40 per cent of those studied when the daily animal protein intake was below 30 Gm. Arnell broke down his 400 cases with regard to hemoglobin, and found a progressive diminution in hemoglobin volumes as the protein intake in the diets decreased. The mean hemoglobin of the deficiency group, 8.3 Gm. per hundred cubic centimeters, was 26 per cent lower than that of the group obtaining an excellent protein intake. He pointed out that hemoglobin contains protein as well as iron, that a deficiency of either iron or protein usually means an inadequacy in the intake of the other, and that probably many of these anemias were caused by long standing nutritional deficiencies in both factors. It is reasonable, therefore, in treating this type of patient, not only to administer iron, but also to increase the intake of animal protein.

McCance, Widdowson, and Lehman have shown that in the presence of high protein intake, 15 per cent of ingested calcium is absorbed, as compared with only 5 per cent in cases of low protein intake. This probably means that amino acids facilitate calcium absorption which may in some cases convert a calcium deficiency into a sufficiency. This relationship should be a significant one in pregnancy.

Although marked strides have been made in improving methods of artificial feeding for babies, it is still generally agreed that human milk is best if of sufficient quantity and quality. To insure an adequate supply of breast milk, preparations must be made during pregnancy. An adequate intake of varied proteins is essential to provide for the growth of the breast, and to permit it to withdraw sufficient amino acids for synthesis to form the particular protein characteristic of the mammary secretory elements. The specific protein, the hormonal action (prolactin) of which is necessary for the continued production of milk, is also synthesized from amino acids.

Meigs states that protein is the most important limiting factor for lactation in cows, and milk yield varies directly with protein intake. It is common practice in animal husbandry to feed protein in excess of maintenance requirements of pregnancy, in preparation for lactation. The importance of class A proteins, particularly those of milk, in the diet of nursing mothers often has been emphasized. Ebbs studied three groups of women with low incomes. One group was given dietary supplements of protein of high biologic value, such as milk, eggs, and cheese. The members of the second group were educated and encouraged to provide their own good antepartum diet. Those in the third group were left to their own poor antepartum diets. Successful nursing occurred in 95 per cent, 88 per cent and 81 per cent respectively, in these groups. Only 5 per cent of the mothers in the best diet group were unable to nurse their babies, while 19 per cent in the poor diet group were unsuccessful.

Arnell and Guerriero have discussed a group of patients having massive edema during pregnancy with marked hypoproteinemia, but without classical signs of toxemia. They attribute this to long standing continued protein malnutrition. These women quickly recovered on high protein diets and salt restriction, supplemented in some cases by parenteral administration of protein, and transfusion in those cases showing signs of complicating severe anemia. Many patients are seen with mild to moderate nontoxic edema in the latter part of pregnancy, without actually lowered plasma proteins which, however, do clear up on increased protein intake. Arnell found that so-called idiopathic edema of demonstrable degree occurred in the deficiency group with a frequency of 40 per cent, approximately four times greater than in a group whose daily protein intake was 70 Gm. or more.

Other things noticed in patients on adequate protein diets as they progress through pregnancy are an increased sense of well-being, less tendency toward constipation, less weight gain with less tendency to retain this weight after delivery, and an increased resistance to intercurrent infection. They are also noted to have shorter and more normal labors. Burke, in her series of cases

studied, found that no obstetric accident of any type occurred in 68 per cent of the women using good or excellent diets, whereas the course of pregnancy was normal in only 42 per cent of those with poor diets.

As to the effect on the infant of adequate protein nutrition in pregnancy, I could find few instances in which the condition of the baby had been correlated with protein intake per se, but found many instances dealing with the effect on the babies of adequate diets in general. Burke found a definite over-all relationship between a good to excellent diet and good physical condition of the baby at birth, and between poor maternal diets and poor condition of infants. The general condition of 94 per cent of infants born in the good to excellent diet group rated as superior and good in pediatric examinations. On the other hand, 92 per cent of the babies in the poor, or very poor diet group were in unsatisfactory condition at birth. No explanation of these relationships was attempted; however, it remained that in this series every stillborn infant, all but one of the neonatal deaths, most of the infants with marked congenital defects, and all the actually and functionally premature infants were born of mothers whose diets had been inadequate. Since any influence of diet on congenital defects must be exerted early in pregnancy, attention to the dietary status of the woman before pregnancy is important.

It was found that infants born to mothers receiving less than 75 Gm. of protein daily in the latter part of pregnancy tended to be shorter and lighter, and to receive a lower pediatric rating. A strong relationship was found on x-ray evidence between protein intake and osseous development of the baby, and this development was only slightly less dependent on dietary calcium. Tooth development noted in skull x-rays was found related to both protein and calcium in like order. Arnell also found a definite relationship between fetal mortality, including stillbirths and neonatal deaths, and protein intake, but states that among those that survived, the general pediatric rating was essentially the same for all groups.

It is of course true that severe protein deficiency is not commonly found throughout most of the United States, except possibly in areas of the South, but I feel that there are many borderline cases, and these are the ones which should receive the attention of doctors in all specialties, and perhaps particularly the obstetrician.

There can be no doubt that an increased intake of protein is essential for the well-being of the expectant mother and her unborn baby. Just as the woman is instructed in the hygiene of pregnancy, so should she be individually instructed in the quantity and quality of food she should eat. The importance of such a diet should be stressed on her first visit and on subsequent visits, until it is certain that the instructions are understood and are being carried out. In certain cases verbal instruction should be supplemented by printed instruction. The result will inevitably be a healthier child, and a mother more capable of properly caring for him.

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PATHOLOGY IN ALLERGY

The modern role of pathology is illustrative of this modern trend. Recent pathological studies suggest a common histologic denominator between diseases now known to be allergic and several conditions with similar histology but with no clinical characteristics of allergy. Future investigations may point the way to some common causative mechanism in these diseases.

A review of the antihistaminic drugs records a definite advance in allergic therapy. Caution is advised that their administration be carefully supervised, and it is recommended that they be employed to supplement rather than to replace well tried principles of allergic management.

The psychologic approach to the eitology of otherwise unexplained allergic disease marks another step forward. A broader acceptance of this diagnostic and therapeutic aid to allergy is urged and predicted for the future.—Walter S. Burrage, M. D., in New England Journal of Medicine.

STREPTOMYCIN IN THE TREATMENT OF GRANULOMA INGUINALE*

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Five patients with granuloma inguinale have been treated with streptomycin at the Kanawha Valley Medical Center. The results with this chronic infectious granulomatous disease have been remarkably good. The disease is endemic in West Virginia, a total of 21 cases having been reportd since 1940, but the authors are certain that many cases go unrecognized. Gronuloma inquinale should be considered in the differential diagnosis of any genital para-anal or perineal lesion.

This is a disease primarily of the skin and occasionally of the lymphatics. It was first described by Congers and Daniels in 1896. Donovan, in 1905, first described the causative organism but it was not until 1943 that Donovan bodies were cultivated. Anderson[1] accomplished this by inoculating the yolk sac of chick embryos with a suspension of ground tissue obtained from a granuloma inguinale lesion. The nature of this oragnism has long been of considerable interest to the medical profession. Donovan felt that it was a protozoan and his opinion has been shared by more recent authors on this subject. Anderson, on the other hand, feels that the organism is a bacillus and has proposed for it the name, Donovania granulomatis.

While granuloma inguinale is classified as a venereal disease, it is so classified principally due to the fact that the lesions ordinarily appear on or about the genitalia rather than due to any proof of a venereal mode of transmission. There is a very marked race susceptibility factor in that the disease occurs most commonly in the Negro race and only rarely in the white race. The incidence ratio between the two races varies from 10 to 1, to 25 to 1 as reported by various observers.[2,3] The prevalence of the disease in West Virginia is not as great as in the deep South. There are two reasons for this: first, the relatively small Negro population in this state, and, second, the higher standard of personal hygiene of the Negroes here.

The initial lesion of granuloma inguinale appears as a small vesicle, papule, or nodule which breaks down to form an ulcer having a hamburber-like base. The margin of the lesion is sharply defined and in many cases is elevated. Lesions occur most commonly on the external genitalia. Other common sites are the inguinal region, the peri-anal region or elsewhere on the perineum. The development of 'pseudo-buboes' often occurs due to the formation of subcutaneous granulomas which eventually rupture. This, then, is not a true bubo although Donovan bodies can occasionally be demonstrated in the regional lymph nodes. By peripheral extension and by the coalescence of daughter lesions large areas become involved which in some cases eventually cover the surface of the external genitalia, the entire perineum, the inguinal regions, and the lower abdomen. Lesions due to auto-inoculation occasionally occur on the neck, chest, and face, in areas in which the patient scratches. In advanced cases involvement of the mucuous membrane of the mouth and pharynx sometimes occurs. Patients having these large lesions become anemic and emaciated due to secondary infection and the continuous exuding of serum. Eventually they may terminate with an intercurrent pneumonitis.

The diagnosis of granuloma inguinale usually is made clinically by the process of elimination of syphilis, chancroid, cancer, or other diseases. The diagnosis should then be confirmed by a relatively simple laboratory procedure. A small piece of tissue, preferably near the edge of the lesion, is obtained by scraping or cutting. This tissue is then macerated and smeared between two slides, and the preparations are stained with Wright's stain. The Donovan bodies can be seen in the cytoplasm of large monocytes as deeply stained dumbbell or safetypin shaped organisms usually encysted.

De Beaurepaire Aragao, in 1913, discovered that tartar emetic was effective in the treatment of granuloma inguinale causing a resolution of lesions with healing. Williamson, in 1933, introduced the use of Fuadin, a more stable antimony preparation, for the treatment of this disease. Since that time there have been several similar substances employed, none of which has been demonstrated to be superior to Fuadin. All observers have reported, however, a high incidence of relapses within a few months following the cessation of treatment. This has led to a general feeling of pessimism on the part of the medical profession as to the eventual outcome of the disease. Furthermore, it has been observed that as these patients are treated repeatedly for succeeding relapses the lesions respond less promptly to the antimony drugs until the lesions finally fail to heal. Local therapy has been used with indifferent success. Sulfonamide drugs are valueless

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in the treatment of this disease. Penicillin is of value only in so far as it temporarily alleviates the surface infection.

Recently, however, streptomycin was tried by Greenblatt, Kupperman, and Dienst[4,5,6] on 91 patients with remarkable results. There were nine relapses in this series, seven of these having received inadequate doses; these were retreated with good results. Greenblatt and his associates believe that an adequate therapeutic regimen consists of 4 Gm. of streptomycin per day (divided into six doses administered every four hours) for five days, or a total of 20 Gm. The Donovan bodies disappeared from the lesions in six days on an average and the lesions themselves healed completely in one to three weeks.

Another series of three cases was reported independently by Barton and others.[7] They used smaller dosages of streptomycin over a longer period of time and reported two relapses.

The latest series was one reported by Hirsh and Taggart[8] in which 46 patients were treated with a total dose of 1 Gm. of streptomycin a day until there was evidence of complete healing of the lesions. These observers have reported no relapses or recurrences.

Toxic reactions, according to Greenblatt, consisted only of febrile reactions in approximately 50 per cent of their cases, pruritus in four cases, and udticaria in one.

In addition to the foregoing we would like to present our experience in the treatment of granuloma inguinale with streptomycin in the dosage recommended by Greenblatt and others, a total of 20 Gm. In every case the diagnosis of granuloma inguinale was verified by finding Donovan bodies in tissue spreads taken from the lesions. Also syphilis, lymphopathia venereum and chancroid were ruled out by darkfield examinations, serologic tests, Frei and Ducrey skin tests, and by clinical examinations, except as noted.

REPORT OF CASES

CASE 1.—J.L.G., Negro, male, age 52, was admitted on December 15, 1944, with the complaint of a "breaking out on my privates" of three months' duration. Abnormal physical findings were confined to the genital area. Two small erosive lesions were seen on the prepuce and a large granulomatous lesion with indurated margins was found in the left inguinal region extending around the scrotum. The latter lesion was approximately 12 by 5 cm. in size. The examiner was unable to demonstrate Spirochaeta pallida by darkfield examination, and serologic tests for syphilis were reported as negative. Skin tests for chancroid and lymphopathia venereum were negative. Donovan bodies were demonstrated in tissue specimens taken from the lesion. Treatment was started on December 18, 1944, with Fuadin, 5cc. given intromuscularly in schedules varying from one injection weekly to three injections weekly. This form of treatment was continued with several brief rest periods until April 4, 1947. In 1946, three x-ray treatments were administered to the affected area, podophyllin (25 per cent in mineral oil) was applied locally several times, and a circumcision done to relieve urinary obstruction due to phimosis. During the two and one-half years of treatment the lesions healed from time to time only to break down during the rest periods. In August 1946, on his return from a probationary period as an outpatient, there was found a positive serologic test for syphilis for which the patient was given rapid treatment. He left the Center against medical advice on April 21, 1947.

FIG. 1.—Relapse of chronic octive gronuloma inguinale of the glans penis and the scrotum following Fuadin treotment

On September 23, 1947, the patient was again admitted to the Center with a relapse of the granuloma inguinale lesions. There were several nummular, beefy lesions on the glans penis, and a beefy-red lesion with a rolled edge approximately 7 by 5 cm. in size in the left cruro-scrotal angle (figure 1). The examiner was unable to demonstrate S. pallida by darkfield examination. Serologic tests for syphilis were negative and have remained negative to date. Donovan bodies were again demonstrated in tissue spreads from the lesions and streptomycin was started September 26, 1947. Within three days evidence of healing could be seen at the margins of the lesions, and by October 6, 1947, 80 per cent healing had been achieved (figure 2). On October 16, 1947,

twenty days after treatment was started, healing was complete and the lesions have remained healed with no evidence of further activity up to the date of last examination, July 9, 1948.

CASE 2.—I.W., Negro, male, age 33, was admitted on November 28, 1947, with the complaint of "sores on the penis" for two and one-half weeks. Two weeks prior to admission 200,000 units of penicillin had been given, presumably for gonorrhea. No improvement in the condition of the lesions was noted following this treatment. Further history was noncontributory except for a history of a bubo in the right inguinal area in May, 1947.

Physical examination was negative except for the genital area. Here were found several dirty, shallow, ulcerative lesions on the glans and on the mucosal surface of the prepuce, these lesions having irregular, elevated margins and a granulomatous base (figure 3). There was partial phimosis due to secondary infection with edema of the foreskin. The lesions were painful and bled freely on examination. On making skin tests for chancroid and for lymphopathia venereum, positive reactions to both Ducrey vaccine and to Lygranum antigen were obtained. Sulfathiazole was administered orally although it was felt that these tests were positive due to previous episodes of these diseases. Tissue spreads were examined and Donovan bodies were demonstrated. S. pallida could not be demonstrated by darkfield examination and serologic tests for syphilis were negative. On December 3, 1947, streptomycin was started and one week after completion of treatment the lesions were 75 per cent healed. When the patient was last seen on an outpatient visit February 13, 1948, the lesions were completely healed.

FIG. 2.—Same lesions as in figure 1. This shows the marked amount of healing present seven days after completion of streptomycin therapy.

FIG. 3.—Active early granuloma inguinale involving the mucosa of the glans penis.

CASE 3.—W.M.L., Negro, female, age 30, was admitted on December 1, 1947, with the complaint of "sore on the privates" of three and one-half months' duration. Two weeks after the onset of symptoms a private physician administered 8,400,000 units of penicillin in a two week period with three injections of bismuth and five injections of an arsenical preparation being given concurrently following an initial diagnosis of syphilis. The lesion did not improve and she was referred to the Center. The remainder of the history was noncontributory.

Physical examination was negative except for the genital area. There, at the posterior fourchette, an indurated, beefy-red lesion was found which was 3 by 2 cm. in size (figure 4). Skin tests for chancroid and lymphopathia venereum were negative. Darkfield examination and serologic tests for syphilis were negative. Donovan bodies were demonstrated in several tissue spreads. On December 3, 1947, streptomycin was started. Eleven days after completion of treatment the lesion had healed completely, remaining so until the date of last examination, June 28, 1948.

CASE 4.—W. T., Negro, male, age 31, was admitted on October 22, 1947. He had noticed an enlarged inguinal node on the left side on or about October 10, 1947. This enlarged rapidly and on October 19, 1947, a small sore was noticed on the dorsal surface of the penis.

The physical examination was not remarkable with the exception of a small eroded papule about 4 mm. in diameter on the prepuce and a large inguinal bubo on the left side which was firm and

nonfluctuant. Skin tests for chancroid and for lymphopathia venereum were negative. Darkfield and serologic tests for syphilis were negative. A diagnosis of lymphopathia venereum was made on the basis of the clinical findings and treatment in the form of sulfathiazole (Gm. 1.0 orally every four hours for five days) was given. On completion of treatment the bubo showed satisfactory

FIG. 4.—Active granuloma inguinale of the fourchette and labia. The raised granulamatous borders of the lesion are 'typical'.

diminution in size and the penile lesion was healed. The patient was discharged October 29, 1947, and six months' serologic follow-up was advised.

The patient was re-admitted on December 29, 1947, and the following interim history was obtained. The inguinal bubo had continued to regress after discharge and ten days later the patient was free of symptoms except for the persistence of a small papule at the site of the original penile lesion. About November 17, 1947, the patient squeezed the papule and a small amount of bloody material was expressed following which the lesion enlarged in size. Two days prior to admission the patient again noticed a slightly tender 'knot' in the left inguinal region.

At this time physical examination revealed a beefy, hypertrophic, granulomatous penile lesion with sharply demarcated borders, 2½ by 1½ cm. in size, on the dorsal mucosal surface of the prepuce (figure 5). An inguinal lymph node on the left side was slightly enlarged and slightly tender. Skin tests for chancroid and for lymphopathia venereum were negative. Darkfield and serologic tests for syphilis were negative. Tissue spreads were examined and Donovan bodies were demonstrated. Treatment with streptomycin was begun December 31, 1947, and seventeen days later the lesion had epithelialized completely. At the date of last examination, February 16, 1948, the lesion was well healed with no sign of renewed activity.

CASE 5.—H.W.L., Negro, male, age 27, was admitted to the Center on January 30, 1948, with the complaint of a sore on his penis for five days. Abnormal physical findings were confined to the frenum of the penis. A lesion, 2 by 1 cm. in size with raised edges and a clean granulomatous hypertrophic base that bled freely, was seen. Darkfield examinations and serologic tests for syphilis were negative. Skin tests for chancroid and lymphopathia venereum were negative. Tissue spreads showed Donovan bodies. Treatment with streptomycin was started February 3, 1948. The lesion epithelialized in six days and when last seen on March 27, 1948, showed no evidence of activity.

SUMMARY

Granuloma inguinale is a disease which should be considered in the differential diagnosis of any genital lesions, particularly in patients of the Negro race. Far advanced 'typical' cases are not the rule in this area due to a higher standard of personal hygiene among the Negro population. Streptomycin is a new therapeutic agent which has produced dramatic results in terms of healing the lesions in this chronic disease. The incidence of treatment failures must still await the test of time, but it offers a new lease on life to the patient whose disease has become resistant to the antimony drugs.

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THE COUNTRY DOCTOR

The medical student, the intern and the young house physician anxiously waiting for opportunity should remember that "all is not gold that glitters." Often success is in the silences and greatness finds its genesis in obscurity. Coveted goals capping the heights are for those who quietly gather strength on the way up. Throughout the history of medicine opportunity has favored the country doctor. Service, the shining secret of the good life, is his shibboleth, his chief incentive, creating the urge for accomplishment. Honest work in quiet places far from the distracting marts of commerce accompanied by worthy ambition may spin the golden thread which leads to the abiding satisfactions of genuine success.

Every time a failing heart responds to digitalis credit must go to William Withering, whose clinical and experimental investigations while he was still a country doctor at Stafford led to the discovery of the therapeutic value of foxglove.

Every time a child receives protection against smallpox through vaccination and indirectly when he receives immunity shots against other diseases, thanks must travel back to Edward Jenner and his dairy maid far removed from the city of London where he served as house pupil under John Hunter. What city doctor has added two and one-half years to the life of every man for all time.

Every time tuberculosis is discovered and successfully managed, both doctor and patient must hark back to the lonely Adirondacks where Edward Livingston Trudeau in total medical isolation, conceived the essential symptamatic, pathagenic, epodemiologic and therapeutic truths connected with the disease and laid down the principles of management.

Many other examples are available but these are among those most deserving of the world's applause and best exemplifying the rewards which may come even in this day to the patient, sagacious, conscientious country doctor.—J. Okla. State Medical Association.

AMEBIASIS*

By JOHN E. STONE, M. D.,
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While the incidence of amebiasis among American troops in World War II has not been disclosed, it is quite apparent that in scattering thirteen odd million American citizens over the globe, this country has had and will continue to have a heavier exposure to amebiasis than has been the case at any time in its previous history.

The Century of Progress epidemic in Chicago in 1933 resulted in about 1,500 cases of alleged amebiasis. The percentage of infection among American soldiers varied from 13 to 27 in all theaters of operation. Whether this widespread dissemination of Endamoeba histolytica will result in a chronic disease in a significantly large group of Americans or whether it will create a serious future public health problem remains to be seen. At any rate, the potential hazard is here and for this reason I have chosen the subject for discussion.

The word 'amebiasis' is used as a general term to indicate infection of human tissue by *Endamoeba histolytica.* Thus the term includes all manifestations of the disease, of which colonic infection is the most common; however, involvement of the liver, lung, pleura, brain, peritoneum, pericardium, skin, et cetera, is included in the term.

E. histolytica was first described in Russia in 1875. American investigation in 1913 clinched the relationship between the ameba and the disease state by having human volunteers ingest infected material with subsequent development of the disease. *E. histolytica* exists as an active vegetative parasite or ameba in stools and tissue and in an inactive cystic phase in which it is resistant to freezing, also chlorine in ordinary dilutions. When cysts are taken into the body, usually through contaminated food or water, they excyst and divide into motile amebae which in turn invade the mucosa, either directly or through the crypts of Lieberkuhn, which they penetrate by a combination of phagocytosis and solution of the tissue. The name histolytica, in fact, arises from this cytolytic behavior, and from this beginning abscesses form, coalesce and extend. Occasionally, the muscular coat of the bowel is penetrated. Frequently amebae migrate via the portal radicles to the liver, where, if immunity is low or virulence high, focal abscesses may arise. From this beginning, almost all of the organs may be involved.

*Presented before the Logan County Medical Society, at Logan, West Virginia, February 11, 1948.

Apparently the normal incidence of infestation in the United States is about 10 per cent. Faust found definite amebic lesions in 6 per cent of accident victims at autopsy in New Orleans.

Amebiasis may manifest itself in many protean ways. All of us speak of amebic dysentery, but actually this is an unusual form of the disease if we mean an acute process, for the vast majority of those infected are asymptomatic and the complaints are vague and indefinite. The ulcerations must be large before symptoms occur.

Amebic colitis varies widely in mode of onset, severity and duration. The onset usually is insidious, not associated with fever and prostration, and is not productive of violent symptoms. The major complaints are constipation, cramps, nausea malaise, fatigue, weight loss, also occasional episodes of loose stools usually accompanied by the passage of some mucus and blood. Many syndromes resemble a functional disorder and the patients themselves often do not realize that they are actually ill. This picture may vary from a benign form, which is hardly recognized as a disease, to the less common acute form of amebic dysentery which comprises less than 10 per cent of all cases, but which resembles acute bacillary dysentery, with fever, leukocytosis, intense abdominal pain, prostration, and severe dysentery, with 20 to 30 bloody stools a day. Many acute cases will subside but will persist as the chronic colitis type, with vague symptoms. It is this more insidious variety that will comprise the main group of cases in the returning armed forces, and that will constitute a public health hazard.

DIAGNOSIS

The physical examination in a nonendemic area is of little help. More than one-half of the cases one sees show practically no physical signs. Occasionally, there is abdominal tenderness, especially over the area of the fecal stasis, which is in the cecum, appendix, ascending and sigmoid colon, and the rectum. In chronic cases the suspect may be pale, and, in case of hepatic involvement, tender in the region of the liver.

The laboratory studies are of most value in diagnosis. The stools should be examined for active amebae when fresh and warm, preferably on a warm stage, but the stool may be concentrated and stained for the typical cyst. It is well to bear in mind when searching for amebae and cysts that people known to be infected with amebiasis frequently will have periods of remissions when neither cysts nor amebae will be present in the fecal stream. The average laboratory probably is not always able to identify the various pathogenic and nonpathogenic amebae and cysts. This is no reflection upon the technicians whatsoever, for it is obvious that when the diagnosis of any disease depends upon the microscopic identification of an organism when there are innocent but similar appearing organisms present, errors may be all too common.

It is an excellent practice when looking for amebae, to examine stools obtained by using a saline laxative (never an oily one) if routine stool examinations are negative. If six properly selected stools are negative, then the statistical chances of obtaining a subsequent positive result are small. The presence of mucus and blood in the stools, along with Charcot-Leyden crystals, is frequently circumstantial evidence of pathogenic amebae. Along with the laboratory discussion belongs that of the proctoscopic examination. Rarely is the sigmoidoscope helpful in these cases, for if rectal lesions are absent the sigmoid is usually free also. The typical findings as seen through the proctoscope are multiple punctate granulating areas and ulcerations. While these findings are not pathognomonic, a swab or washing from the suspicious lesions, if examined immediately, ofttimes will serve to establish the diagnosis.

BLOOD PICTURE

Mild hypochromic microcytic anemia may be present, and the white blood count normal or slightly elevated, except in the acute form of dysentery, and in amebic hepatitis, when a leukocytosis as high as 20,000 may occur. Rarely, however, is there any relative increase in the polymorphonuclear cells. Peculiarly so and contrary to popular opinion, eosinophilia is not present in amebiasis. There is a complement fixation test with *E. histolytica* antigen which is fairly accurate and especially valuable in extra-intestinal amebiasis. Specimens of serum may be sent to the National Institute of Health at Bethesda, Maryland for this test. The milder cases and carrier states usually give negative results.

X-RAY EXAMINATION

This is usually of little diagnostic aid, but occasionally in cases in which the cecum is involved one may find evidence of contour irregularity and irritability. In the complications of colon amebiasis, such as liver and lung involvement, the x-ray is of great help.

COMPLICATIONS OF AMEBIASIS

Following are the conditions we must watch for in our veterans who have been exposed to amebic infection:

LIBRARY OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA

CHRONIC COLITIS.—The British are reporting a large group of cases of drug resistant chronic colitis with anemia, malnutrition, and avitaminosis, all apparently arising from an original episode of amebic dysentery. Many such cases were not adequately treated at the onset because of the exigencies of war. In the United States and in the American armed forces, fortunately, there have been very few of this type. Aside from being the 'trigger mechanism' in starting a case of nonspecific chronic colitis, it is a rather uncommon form. In my own observation throughout the Middle East during a three and one-half year period, we certainly found less than 5 per cent recurrence after treatment, even including those soldiers exposed to reinfection. It is true, however, that most treatment failures do occur in cases of long duration.

AMEBIC HEPATITIS.—This is the second most common type of amebiasis and may develop anywhere from three days to twenty years after infection. The signs and symptoms are fairly definite. Jaundice is rare. Fever and leukocytosis are common, and the most helpful sign is pain and tenderness over the liver, especially to fist percussion. If the process is advanced with abscess formation, there may be back and shoulder pain and fixation or elevation of the diaphragm. This type of amebiasis should be suspected in any patient who has ever been exposed to amebic infection.

PLEUROPULMONARY AMEBIASIS. — This type, usually but not always, follows hepatic amebiasis, with the hepatic abscess perforating into the pleuropulmonary space with subsequent pneumonitis and empyema. The signs and symptoms are indicative of pulmonary pathology with rales and dullness over the affected area. Fever, leukocytosis and a cough productive of the classical brownish sputum are present. X-ray examinations of the chest and microscopic examination of the sputum are most helpful.

AMEBIC GRANULOMA.—A chronic granuloma or ameboma which may be palpable may arise in the walls of the cecum and rectosigmoid colon, and may resemble a carcinoma, diverticulitis or appendiceal abscess, depending on its location. The lesion usually is longer than a carcinoma, is less stenosing, and rarely affects the mucosal pattern. It usually is a late manifestation of amebiasis.

APPENDICITIS.—Cecal amebiasis may resemble appendicitis, and apparently *E. histolytica* can actually cause appendicitis. If amebic involvement is suspected, early treatment should be started, but the decision as to the advisability of operation on any given case should be based solely on the surgical considerations which govern the management of ordinary acute appendicitis. In my own experience, after we did several appndectomies on soldiers who subsequently proved to have amebic colitis, we were able to reduce our rate of appendicitis operations by first looking for amebiasis in cases of right lower quadrant pain in personnel located in heavily infected areas.

RECTAL STRICTURE.—Pobably a result of secondary infection, rectal stricture occurs in less than 1 per cent of cases. It should be handled like any other stricture, with dilations, colostomies, et cetera.

PERFORATION.—As a complication of acute colitis, perforation may occur early, or, in chronic colitis it may occur late, but the tendency in the long standing disease is toward slow penetration, with adhesions and localized abscesses. Hepatic abscess, in addition to perforating into the pleural space, may also rupture into the free peritoneum and produce generalized peritonitis, usually a fatal complication.

LESS COMMON COMPLICATIONS

Cutaneous amebiasis usually follows a draining amebic sinus. and is quite painful, but will respond promptly to treatment. Amebic brain abscess behaves like any brain abscess and is usually fatal. Genito-urinary amebiasis is rare, but infection of the penis, epididymis and bladder have been reported.

Rupture of an hepatic abscess may occur into the peritoneum (as mentioned), the gallbladder, the stomach, the vena cava, or the bowel.

ASYMPTOMATIC CARRIER

About 10 per cent of persons in the United States have stools which are positive for *E. histolytica.* These individuals have no symptoms of disease; however, since the presence of cysts in the stools requires the existence of trophozoites in colonic lesions, most observers now are inclined toward the belief that the so-called 'healthy carrier' is nonexistent. We know that there are many factors which determine whether or not a person exposed to amebiasis will be susceptible. These include general resistance, diet, altered intestinal mucosa (as in bacillary dysentery), and even the pH of the fecal stream. One conclusion is sure: the carriers of *E. histolytica* constitute the human reservoir from which clinical amebiasis is derived and all carriers should be treated.

TREATMENT OF AMEBIASIS

Amebic dysentery may be treated by various methods, but the most successful appears to be the combination of emetine hydrochloride administered either subcutaneously or intramuscularly (but never intravenously), in a dose of 65 mg. per day (grains 1) for six to nine days. Concurrently an orally active iodine-containing amebacide is given for ten days. Vioform 260 mg. (grains 4) three times a day, diodoquin 600 mg. (grains 10) three times a day, or chiniofon (grains 15) 1 Gm. three times a day may be given. If the stools are negative, the patient may be discharged and instructed to take carbarsone (grains 4) three times a day for ten days, followed by a course of iodides for ten days. Always give emetine if the patient has or has had amebic dysentery and has evidence of extra-intestinal amebiasis. This drug should never be given to patients unless they are at bed rest, for it is toxic and can produce death. While it is being given, the blood pressure and pulse should be taken daily along with physical examinations. The commonest toxic indications for stopping the drug are nausea, emesis, diarrhea, lowered blood pressure, tachycardia, T wave changes and premature contractions in the electrocardiogram. Focal myopathy, e.g., wrist drop, likewise is an indication for withdrawal. In treatment failures, retention enemas of 1 per cent carbarsone in 2 per cent sodium bicarbonate, or 2 per cent chiniofon in water may be helpful.

Amebic hepatitis should be treated as already outlined, except that the emetine should be given for a longer period of time, preferably in two courses with an intervening rest period of one week. The response is dramatic, the signs and symptoms abating in seventy-two hours.

All cases of hepatic abscess should receive preoperative treatment with emetine. Try to give 6 to 10 grains if possible. If the abscess does not absorb, surgical aspiration should be employed rather than open drainage. The site of aspiration must be determined by physical signs and x-ray. If preoperative emetine has been given, there is no need to inject a solution of emetine into the abscess cavity.

TREATMENT OF CARRIERS

The iodine-containing compounds are preferable to the arsenicals since they are potentially less toxic. It is generally accepted that emetine is not necessary. A recent study in the Canal Zone indicates that emetine contained in 'enseals' can be given to ambulatory patients with effective results in intestinal amebiasis without danger of toxic reactions.

FOLLOW-UP CARE

Study of stool should be repeated weekly for one month, monthly for six months, and half yearly for two years, because of the possibility of recurrence.

FUNCTIONAL GASTRO-INTESTINAL SEQUELAE

This is a common disorder in many of the veterans who have had protracted or extensive amebic colonic involvement. The common symtoms suggest an irritable colon. The patient may have cramps and loose stools, especially after meals. Attacks often are precipated by emotional strain, fatigue and indiscretions. These cases should not be treated as relapses unless the diagnosis can be proved by the demonstration of *E. hystolytica*, for results will be most disappointing. The best treatment for this condition is reassurance, diet regulation, sedation and antispasmodic drugs.

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SALICYLATES IN RHEUMATIC FEVER

The opinion is now quite general that while there are remedies better than the salicylates to alleviate the joint pains and control the fever of the acute rheumatic state, they do not have any effect on the disease or influence the development of the cardiac complication. Consequently, while salicylates are still used to relieve pain and temperature, they are usually discontinued as soon as the patient complains of aural signs of intolerance or if vomiting indicates the beginning of the gastric irritation.—International Medical Digest.

Sodium floride treatment to check tooth decay is being demonstrated nationally by mobile units of the USPHS. Congress has earmarked $1,000,000 for the program.—R. N.

The President's Page

The group insurance plan adopted by the House of Delegates is getting under way to the extent that all problems relating to the mandate have been cleared for action by the insurance company. Each member of the society in the near future will receive information relative to the proper procedures, and a full scale campaign will be at your service. The president of each county medical society, as well as the delegates who attended the annual meeting at Huntington, will be expected to lend every aid possible, and see to it that the insurance contract is properly placed before each group.

We are about to take a very important step. Members will recall that the Continental plan was accepted by the unanimous vote of the House of Delegates. To become effective, it is necessary that at least fifty per cent of our members participate. It is important to note that a group plan of insurance does not require complete physical examination and that the rates will be much lower on the average than would otherwise prevail.

When an individual asks for insurance coverage it is an investment service. It becomes a part of your family or financial assets, and should be accepted as such. The benefits derived from the policy we have selected are considered worthy of your consideration.

There are many reasons why we should all be participants in this program. Some may contend that they have all the necessary protection they need, and no doubt they have; but, on the other hand, there are many of our good doctors who do not have sufficient coverage, and who, for physical and other reasons, would not be able to participate in any other insurance plan. To the latter group, I would suggest that application be filed without delay. To you who are fortunate enough to have full coverage, I would suggest that you give serious thought to your less fortunate brother. By acting now and accepting the program in the spirit in which it was presented to us at the convention, you will most certainly experience the feeling that you have rendered a real service.

If members will cooperate fully, this part of our medical program for the year will be successful. Already many of our older members have expressed deep appreciation for the efforts of the committees which worked so faithfully to provide us with the best insurance contract available.

Thomas Bee

President.

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ERNEST E. IRONS, PRESIDENT ELECT

At the recent meeting of the American Medical Association in Chicago, the House of Delegates chose as president elect one of the outstanding internists in the world, Dr. Ernest E. Irons, of Chicago.

Dr. Irons was born in Council Bluffs, Iowa February, 17, 1877, the son of Edward and Mary Sharp Irons. He received the B. S. degree from the University of Chicago in 1900; the M. D. degree from Rush Medical College in 1903; and the Ph. D. degree from the University of Chicago in 1912. He was a fellow at the University of Chicago in 1900-01, and assistant instructor in pathology and bacteriology there in 1902-04. He interned at the Presbyterian Hospital, Chicago, and his entire professional life has been spent in that city, during all of which time he has been engaged in medical teaching. He is currently professor emeritus of clinical medicine at the University of Illinois. He is a past president of the American College of Physicians, and holds membership in Phi Beta Kappa, the Association of American Physicians, the American Association of Pathologists and Bacteriologists, the American Society of Bacteriologists, the Chicago Pathological Society, and the Chicago Society of Medical History.

Dr. Irons has long been active in organized medicine. For the past several years he has been the resident trustee of the American Medical Association and has served as secretary of the Board of Trustees. The organized profession of America will be well guided and the interests of both medicine and the public well guarded during the incumbency of Dr. Irons.

VACATION A "MUST" FOR EVERYBODY

Vacation time is here again and some of our doctors are taking a needed rest in the mountains, at the seashore, or just traveling around. However, many more doctors stay at home the year around than leave for even a few days' vacation.

In quite a few instances, there is a legitimate excuse for failing to take time off, especially in industrial areas where it is alwayys difficult to obtain the services of a relief doctor.

Every doctor owes it to himself and to his family to try to get away for a few days during the vacation period. The reasons are perfectly obvious, and the need is so ably expressed in a recent Health Talk issued by the educational committee of the Illinois State Medical Association that we reproduce it for the benefit of West Virginia doctors who might think it unnecessary to take a vacation:

> The axiom "a change is as good as a rest" is a fact, for man, woman and child. This is particularly true of the person who "loves" his job and, in fact, is so fond of it that he doesn't want to be away from it, even for a time.
>
> Everyone needs a vacation because, unconsciously or not, everyone gets tired of doing the same thing, no matter how happy one is in the accomplishment, and it is wise to remember that sameness can produce staleness.
>
> A vacation need not be expensive. One does not need even to go away. A vacation is just taking time out to do many of the things that are not included in the ordinary working day. Getting away from the job and carrying on these different activities, if not carried to excess, is a form of recreation that puts a new zest and vitality in returning to the "work-a-day" chores.
>
> Children, for example, grow tired of school life. The routine of classes and study have a palling effect on the child which shows in the wild cry of "school's out" on the last day of the school year. In the adult, there is pleasant excitement in planning for vacation and the first day away from office routine is every bit as satisfying as the child's joy that school is out.
>
> So plan your change and plan it with all the enthusiasm of a young heart. Bear in mind, however, that a wise head will really keep your vacation a happy time for yourself and those for whom you are responsible.

THE POLIO SCARE

With the advent of the season of greatest incidence of poliomyelitis, and with the North Carolina outbreak, has come the recurrent scare about the disease. There is no definite preventive for infantile paralysis. However, Dr. H. E. Van Riper, medical director of the National Foundation for Infantile Paralysis, in a recent issue of Hygeia lists six safeguards against infection. They are so common sense that we list them:

"1. Practice cleanliness.
2. Avoid new contacts.
3. Don't get overtired.
4. Avoid chilling.
5. Don't swim in polluted waters.
6. Call your doctor at once."

"These are simple safeguards", says Dr. Van Riper, "but important; especially the advice to call your doctor at the first suspicious signs. Early medical attention is the best protection parents have against infantile paralysis."

AN ITEM IN THE NEWS

Notwithstanding rebuff after rebuff in Washington, socialized medicine continues to raise its ugly head in Congress. There is every probability that the Government's so-called health program will be on the agenda for the special session called by President Truman for July 26. However, there now appears to be little likelihood that any positive action will be taken during this special session by either the Senate or House.

Some West Virginia newspapers have been out-spoken in opposition to state medicine. One of these, the Clarksburg Telegram, continues to expose the fallacy that regimentation will solve our medical problems. This central-state daily had this to say in a recent issue concerning the achievements of free medicine:

> A short time ago an item appeared in the news which, while it didn't make banner heads, is an example of the kind of arduous progress that serves us all.
>
> Last year, the item said, the death rate from tuberculosis dropped to a new low throughout the nation. For the first time in our history, the number of fatalities from this cause was under 50,000.
>
> That wasn't the result of chance. It was, instead, the result of decades of hard and often unrewarding work by doctors and other scientists. A long list of factors had a part in the achievement—better preventive medicine, infinitely improved methods of treatment for the afflicted, a generally higher standard of living, and so on.
>
> Every major advance in medicine, save for rare instances where some revolutionary drug is discovered, is made much in this way. And the United States, with its system of medicine, unhampered by bureaucratic domination, has been a leader in conquering disease—a fact which has been proven in survey after survey. By contrast, medicine has generally been backward in the nations where it is controlled by the state —the standards of treatment have gone down while the cost, as in the case of all governmental activity, has gone up.
>
> We in the United States are leading longer, healthier lives. Diseases which were almost sure killers not so many years ago now offer little danger. A system of voluntary prepaid medical care has been built up which brings the cost of treatment and hospitalization within the easy reach of the majority of people. These are achievements of free medicine which must not be forgotten.

We feel that The Telegram's discussion of health discussion problems in this country is worthy of mature consideration by the members of Congress. We hope that the members of the West Virginia delegation will give the subject thought in connection with the report of the Brookings Institution, filed just a few weeks ago with Senator H. Alexander Smith, of the Senate committee on labor and welfare.

Those who prepared the Brookings report feel that government control of medicine will not in any way help to solve our medical problems. Certainly, voluntary pre-paid medical and hospital service plans are preferable in every way to compulsory health insurance.

PEDIATRIC-PSYCHIATRIC SERVICES

In recent years an ever-increasing number of pediatricians have taken a keen interest in the psychiatric implications of their clinical practice with young children. During the past thirty years a number of combination pediatric-psychiatric services have been organized in various teaching centers. The pediatric-psychiatric clinic established in 1935 at the Babies Hospital, the Presbyterian-Columbia Medical Center, New York, is an example of this type of teaching venture. Here pediatricians and psychiatrists work together in establishing diagnostic and therapeutic procedures aimed toward the correction of personality and behavior disturbances and the formulation of prophylactic measures. The pediatrician oriented in psychiatry finds himself better equipped to meet the modern demands of his practice.

One out of twenty of the world's 800,000,000 youngsters under 18 years old is in the United States. Only one county in five has a full-time welfare worker, and there are only 400 child guidance clinics operating in this country. About half of the states have no such clinic. The existing clinics are able to treat yearly about 125 children each or a total of 50,000. Most of these clinics are in the large cities, while over half of the children live in small towns or countryside where guidance in a serious behavior problem is not available. —Nolan D. C. Lewis, M. D., Pennsylvania Medical Journal.

General News

WEST VIRGINIA DOCTORS PARTICIPATE IN ANNUAL AMA MEETING IN CHICAGO

Dr. R. L. Sensenich, of South Bend, Indiana, who was installed as president of the American Medical Association, June 22, at the 101st annual meeting held in Chicago, has long been identified with and active in the affairs of organized medicine. Prior to his selection as president elect in 1947, he had served for several years as a member of the Board of Trustees. His specialty is internal medicine.

The new president elect is Dr. Ernest Edward Irons, of Chicago, who has been serving as secretary of the Board of Trustees. He is professor emeritus of clinical medicine at the University of Illinois College of Medicine, and is past president of the American College of Physicians. He is a member of the American Board of Internal Medicine, the Association of American Physicians, the American Association of Pathalogists and Bacteriologists, and the American Society of Bacteriologists.

Dr. R. W. Fouts, of Omaha, Nebraska, speaker of the House of Delegates, was elected vice president, and Dr. F. F. Borzell, of Philadelphia, vice speaker, was elected speaker. He is succeeded as vice speaker by Dr. James R. Reuling, of Bayside, New York.

Dr. Walter B. Martin, of Norfolk, Virginia, who is well known to members of the profession in West Virginia, was elected member of the Board of Trustees, along with Drs. Gunnar Gundersen, of La Crosse, Wisconsin, and Edwin S. Hamilton, of Kankakee, Illinois. Dr. Henry B. Mulholland, of Charlottesville, Virginia, was elected a member of the Council on Medical Service.

Scientific and Technical Exhibits

The general and scientific sessions were well attended, and the technical and scientific exhibits on the Navy Pier were visited by thousands of doctors during the five-day meeting. Never before has there been such an interesting display at an annual meeting. Every inch of the upper deck of the Pier not devoted to section meetings was used for technical and scientific exhibits. Dr. Thomas G. Hull, director of the committee on scientific exhibit, who for several years has attended annual meetings of the West Virginia State Medical Association, was in charge of the scientific exhibits, and the 320 technical exhibits were under the direct supervision of Thomas R. Gardiner, American Medical Association business manager.

West Virginia Delegates Present

Dr. Walter E. Vest, of Huntington, and Dr. Ivan Fawcett, of Wheeling, were present as members of the House of Delegates from West Virginia. Dr. W. P. Black, of Charleston, alternate delegate, also attended the sessions. Doctor Vest served as a member of the reference committee on reports of officers.

Dr. R. S. McLaughlin on Program

Dr Ralph S. McLaughlin, of Charleston, was one of the guest speakers before the section on ophthalmology. He presented a paper on Friday, June 25. His subject was, "Nonmedical Problems in Industrial Ophthalmology." The speaker discussed the diagnos's and treatment of injuries, and routines, histories, reports, legal complications, and other administrative functions in the practice of industrial ophthalmology.

Doctor McLaughlin's paper was discussed by Drs. Hedwig S. Kuhn, of Hammond, Indiana, and William A. Sawyer, of Rochester, New York.

Dr. Hudgins Presents Exhibit

Dr. A. P. Hudgins, also of Charleston, presented an exhibit on "Perineal Dissection for Repair" in that part of the scientific exhibit devoted to urology. In the exhibit Doctor Hudgins showed variations in tecnic in perineal dissection.

Near Record Registration

The registration of fellows totalled 11,765 on June 24, and there is no doubt that the figure exceeded 12,000 including those registered on June 25. This is within about a thousand of the record number of doctors registered at the Atlantic City meeting in 1947.

West Virginia Doctors Present

The following is a list of West Virginia doctors registered up to five o'clock on June 24:

Randolph L. Anderson, Charleston; Robert T. Bandi, Wheeling; J. Bankhead Banks, Charleston; J. F. Barker, Huntington; H. George Bateman, Williamstown; Carl S. Bickel, Wheeling; W. P. Black, Charleston; James R. Bloss, Huntington; Harold Bowcock, Martinsburg; J. H. Boutwell, Huntington; Altamont H. Bracey, Welch; Fred E. Brammer, Dehue; John J. Brandabur, Huntington; Donald P. Brown, Kingwood; Henry M. Brown, Charleston; Isidore E. Buff, Charleston; A. P. Butt, Elkins.

John E. Cannaday, Charleston; F. C. Chandler, Bridgeport; Roger E. Clapham, Martinsburg; Orva Conley, Parkersburg; Wm. W. Davis, Parkersburg; Duke A. Dent, Charleston; John E. Echols, Richwood; A. B. Curry Ellison, Charleston; James A. Eyres, Weston; Ivan Fawcett, Wheeling; S. Oscar Fry, Charles Town; Cole D. Genge, Huntington; John W. Gilmore, Wheeling; S. William Goff, Parkersburg; Richard Hamilton, St. Marys.

Irving J. Hanssmann, Philippi; George P. Heffner, Charleston; E. Bennette Henson, Charleston; Edward V. Henson, So. Charleston; L. I. Hoke, Nitro; Chesteffield J. Holley, Wheeling; Frank J. Holroyd, Princeton; Dean L. Hosmer, Bluefield; A. P. Hudgins, Charleston; Edna Myers Jeffreys, Philippi; A. G. Kammer, South Charleston; Frank V. Langfitt, Clarksburg; L. R. Leeson, Parkersburg; J. W. Lyons, Holden.

Theodore P. Mantz, Charleston; G. R. Maxwell, Morgantown; Franklin B. Murphy, Philippi; James E. McClung, Richwood; U. G. McClure, Charleston; William C. McCuskey, Wheeling; S. Elizabeth McFetridge, Shepherdstown; Donald K. McIntyre, Berkeley Springs; Ralph S. McLaughlin, Charleston; Louis E. Nolan, Fairmont; A. J. Niehaus, Wheeling; Jones Clarence Porter, Jr., Newport; Phillp Preiser, Charleston; Walter G. J. Putschar, Charleston.

George W. Rose, Clarksburg; W. P. Sammons, Wheeling; H. A. Shaffer, Beckley; James S. Skaggs, Charleston; Charles E. Smith, Terra Alta; Robert M. Sonneborn, Wheeling; Everett H. Starcher, Logan; Hayward V. Sumner, Huntington; R. B. Talbott, Martinsburg; Ingram C. Taylor, Martinsburg; W. A. Thornhill, Jr., Charleston; John Paul Trach, Fairmont; Walter E. Vest, Huntington; Halvard Wanger, Shepherdstown; Gates J. Wayburn, Huntington; Alexander Witkow, Charleston; William R. Yeager, Parkersburg.

OVER ONE HUNDRED APPLICATIONS FILED FOR HOSPITAL LICENSE

Applications for license under the new state hospital licensing law have been received by the state health department from 109 of the 152 known institutions caring for the sick and injured in this state. The deadline for submission of applications expired July 1.

Of the applications received, 70 were from general hospitals, two from tuberculosis hospitals, 11 from doctors maintaining five or more beds in their offices, 9 from osteopathic hospitals, and 17 from nursing and alcoholic homes.

The overall report compiled by the state health department shows that applications have not been filed by nine general hospitals, six doctors maintaining offices with five or more beds, two osteopathic hospitals and twenty-five nursing and alcoholic homes. Dr. N. H. Dyer, state health commissioner, has made it clear that receipt of an application will constitute compliance with the law until an inspection has been made and a license issued. Ample opportunity will be allowed all institutions to make adjustments necessary to meet the various standards set up under the regulations.

The owners of all institutions thought to be covered by the law which have not yet filed applications for license have been notified that they are subject to a penalty.

The act provides a fine of not more than one hundred dollars, or imprisonment in the county jail of not more than ninety days, or both, for the first offense. For each subsequent offense the fine may be increased to not more than five hundred dollars, with imprisonment in the county jail for a period of not more than ninety days, or both, at the discretion of the court.

License No. 1 under the new law was assigned to the Mountain State Memorial Hospital, in Charleston. This hospital was the first to meet all minimum requirements for license and to be visited by an official representative of the state health department.

NEW POLIO TRAINING CENTER OPENED

A new training and treatment center at the City Hospital in Cleveland, Ohio, has been opened by the National Foundation for Infantile Paralysis in cooperation with Western Reserve University. This is the second of such centers financed by National Foundation funds to be opened in the eastern part of the country. The other is located in New York City. In addition, there are five centers for the training of physical therapists.

According to T. Sterling Evans, of Charleston, West Virginia, State Representative of the National Foundation, no tuition is required for doctors, nurses, and physical therapists who desire to avail themselves of these short courses. The local chapter in the county in which the doctor or nurse resides will pay traveling expenses. It is most important that the training facilities be used to their maximum capacity, and interested doctors, nurses and physical therapists should contact Mr. Evans without delay.

The following is a list of the centers and dates of courses which are scheduled for the summer and early fall of 1949:

For physicians: City Hospital, Cleveland, Ohio, July 5-15; Aug. 2-12; Aug. 30; and Sept. 9. And Knickerbocker Hospital, New York City, July 6-10; Sept. 13-17; and Oct. 25-29.

For nurses: City Hospital, Cleveland, Ohio, July 16-30; Aug. 3-27; and Sept. 13-25. And, Knickerbocker Hospital, New York City, Aug. 30; Sept. 18.

For physical therapists: City Hospital, Cleveland, Ohio, July 16-30; Aug. 3-27; and Sept. 13-25. And, Georgia Warm Springs, Warm Springs, Georgia, three months beginning first Monday in October, January, and April.

PHC EXAMINES 47 DOCTORS

At the summer meeting of the public health council, held July 4-6, at Charleston, seventeen doctors were examined for licensure by reciprocity and thirty by direct examination. This is one of the largest groups ever examined at a meeting of the PHC. At the same time, examinations to practice chiropody were given to four applicants.

PHC TO MEET OCT. 4-6

The fall meeting of the public health council will be held October 4-6, 1948, at the Daniel Boone Hotel, in Charleston, for the purpose of examining applicants for license to practice medicine in West Virginia.

CONTINENTAL GROUP PLAN READY

A pamphlet descriptive of the group health and accident policy approved by the House of Delegates is being mailed by the Continental Casualty Company to all members of the West Virginia State Medical Association. The pamphlet contains full information concerning the group plan, which provides indemnity of from $25.00 to $75.00 for disabilities due to illness or accident. Only members of the State Medical Association may participate in the group policy, which is non-cancelable, with no increase in premiums due to age.

The Continental plan was selected by a subcommittee of the Council named to investigate group plans available, and was submitted to the House of Delegates with the full approval of the Council. The House of Delegates unanimously accepted this plan.

It is important that interested members sign the participating card and return it to the Continental Casualty Company without delay. The master policy will become effective when fifty per cent of the members of the State Medical Association have signed the contract, copies of which are being mailed as this issue of The Journal goes to press.

DR. MICHAEL GAYDOSH, OF WHEELING, NAMED 1948 AMERICAN SLOVAK FATHER

Dr. Michael Gaydosh, of Wheeling, has been chosen by the officers and directors of Slovak V Amerike as the American Slovak Father for 1948. The telegram sent to Doctor Gaydosh, advising him of his selection, reads as follows:

> "This special honor was bestowed upon you for your unselfish work which you performed for humanity as one of the oldest American doctors of Slovak descent. Your sacrifices and endeavors in the field of medicine and fraternalism stand high and merit special recognition. Congratulations. May God bless you and your dear family."

Doctor Gaydosh, a native of Czechoslovakia, came to this country when he was 13 years of age. After working at several jobs to finance his way through medical school, he received his M.D. degree from the Medical College of Virginia in 1904. He opened offices in Wheeling in 1905, and has continued in practice there since that time.

Three of Doctor Gaydosh's children are doctors. Two of them, Dr. Francis Gaydosh and Dr. Michael Gaydosh, Jr., are located in Wheeling. A daughter, Dr. Anna Gaydosh Hughes, lives in Bryn Mawr, Pennsylvania. Her husband, Dr. Beland Hughes, is a member of the staff of the University of Pennsylvania School of Medicine. Doctor Gaydosh is the father of two other daughters, Mrs. Tom Moore, of Charleston, West Virginia, and Mrs. Peter Jurchak, of Wilkes-Barre, Pennsylvania.

Doctor Gaydosh has served as supreme medical examiner for the First Slovak Catholic Union for the Past 30 years. He is also a member of the executive board of the Slovak League of America.

ACP TO MEET IN NEW YORK CITY

The 30th annual session of the American College of Physicians will be held March 28—April 1, 1949, in New York City. Dr. Franklin M. Hanger, Jr., is chairman of the committee on local arrangements, and is also chairman of the committee which will arrange clinical and panel discussions.

The program of morning lectures and afternoon general sessions will be in charge of Dr. Walter W. Palmer, the president. Doctor Palmer is director of the Public Health Research Institute of the City of New York, Inc.

ACS COMMITTEE TO STUDY CANCER PROBLEMS

Dr. Russell B. Bailey, of Wheeling, member of the board of directors of the American Cancer Society, has been named a member of a committee to study problems incident to the care of the indigent and medically indigent terminal cancer cases. An effort will be made to develop a formula that can be applied at the state and county levels.

The special committee was named at a meeting of the board of directors, held June 18, in New York City, which meeting was attended by Doctor Bailey.

RELOCATIONS

Dr. Charles E. Davis, Jr., who has served for two years as chief surgeon at the Beckley Hospital, has moved to Norfolk, Virginia, where he will continue the practice of his specialty of surgery, with offices in the Medical Arts Building.

* * * * *

Dr. Richard N. O'Dell has opened offices at 2635 Third Ave., Nitro, after spending a year in postgraduate work in internal medicine at the University Hospital, Syracuse, New York.

* * * * *

Dr. Andrew K. Butler, formerly of Hopemont, has just completed three years' training at University Hospital, University of Michigan, Ann Arbor, in diagnostic and therapeutic radiology, and has located at Riverside Hospital, Newport News, Virginia, where he will practice his specialty of radiology, beginning August 1.

* * * * *

Dr. Charles S. Harrison, of Clarksburg, has accepted a two-year residency in obstetrics and gynecology at Woman's Hospital, New York City, effective July 1, 1948.

* * * * *

Dr. David C. Prickett, of Alloy, has moved to Parkersburg, where he has accepted a surgical residency at St. Joseph's Hospital.

* * * * *

Dr. Frederick E. Amick, of Charleston, who has completed a two-year postgraduate course in pediatrics at the Gallinger Municipal Hospital, in Washington, D. C., has located at Huntington and associated himself in the practice of his specialty with Dr. Thomas G. Folsom, with offices in the Professional Building.

COUNTY HEALTH OFFICERS CONFIRMED

At the July meeting of the public health council, held in Charleston, Dr. J. M. Coram, of Beckley, was confirmed as part-time health officer for Raleigh County, and Dr. T. H. McClure, of Marlington, as part-time health officer for Pocahontas County.

Doctor Coram, who formerly served as full-time director of the Raleigh County health department, succeeds Dr. W. W. Hume, deceased. Dr. McClure has been serving as part-time health officer in Pocahontas County since the resignation, in March, 1948, of Dr. Andrew E. Amick, of Lewisburg, as health officer and director of Health District No. 2. This district also includes Greenbrier and Monroe counties.

AMERICAN CONGRESS OF PHYSICAL MEDICINE

The 26th annual scientific and clinical session of the American Congress of Physical Medicine will be held September 7-11, 1948, at the Hotel Statler, in Washington, D. C. All sessions will be open to members of the medical profession in good standing with the American Medical Association. Full information may be obtained by writing to the American Congress of Physicial Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

NEW MEMBERS OF STATE MEDICAL ASSOCIATION ELECTED SINCE JAN. 1

The following is a list, by component societies, of new members of the West Virginia State Medical Association elected since the publication of the 1948 roster:

Barbour-Randolph-Tucker

Lea, Melvin E. — Philippi
Sanner, J. E. — Parsons

Boone

Ballard, W. R. — Prenter
Clay, John L. — Madison
MacCallum, O. D. — Madison
Ritchey, Hardin M. — Whitesville

Cabell

Allen, Albert L. — Huntington
Chaboudy, Louis — Huntington
Flesher, George T. — Huntington
Garrett, B. D. — Huntington
Gribovsky, Emil — Huntington
Guthrie, W. W. — Huntington
McFarland, T. C. — Huntington
Pearson, John — Huntington
Terlizzi, C. L. — Huntington
Thomas, Wes C. — Huntington

Central West Virginia

Wise, Herbert B. — Weston

Eastern Panhandle

McIntyre, Donald K. — Berkeley Springs

Fayette

Boone, R. R., Jr. — Smithers
Medlock, James B. — Beards Fork
Morin, G. L. — Kimberly
Oden, W. Philip — Oak Hill
Pantera, George B. — Oak Hill
Prickett, David C. — Alloy

Greenbrier Valley

Bond, E. M. — Union

Hancock

Whitaker, Theodore R. — Weirton

Kanawha

Ellison, A. B. Curry — Charleston
Harshbarger, Rogers W. — St. Albans
Henson, Edward V. — South Charleston
Holt, John A. B. — Charleston
Spector, Horatio — Charleston
Witkow, Alexander — Charleston
Wohlford, Reuben F. — South Charleston

Minga

Hodge, O. P. — Matewan
Williams, Arnold C. — Glen Alum
Yoho, David E. — Delbarton

Monongalia

Clark, M. Dorcas — Morgantown
Edstrom, Henry — Morgantown
Tucker, E. B., Jr. — Morgantown

McDowell

Dodrill, R. Moore — Welch
Gale, Richard O. — Welch
Ockerman, R. K. — De Motte (Ind.)

Parkersburg Academy

Quillen, O. L. — St. Mary's

Potomac Valley

Brown, James D. — Romney
McCoy, Archibald — Petersburg

Raleigh

Harvey, Harold E. — Beckley
Hedrick, John E. — Beckley
Lilly, Wallace B. — Beckley
Sato, Sam I. — Slab Fork

Summers

Johnson, J. J. — Hinton

WEST VIRGINIA MEDICAL CENTER

The name of the Kanawha Valley Medical Center, in South Charleston, has been changed to "West Virginia Medical Center." Action in this matter was taken at the July meeting of the public health council and the change was made on recommendation of Dr. N. H. Dyer, state health commissioner.

A resolution suggesting that the name be changed was unanimously adopted by the House of Delegates of the West Virginia State Medical Association at the annual meeting held in Huntington in May. The change was suggested because the name, "Kanawha Valley Medical Center," undoubtedly left the impression that the services were limited to Kanawha county or the Kanawha valley rather than to the state as a whole.

The type of service rendered will in no way be affected by reason of the change in name. The institution is not a general medical center, but is being operated for the exclusive treatment and control of syphilis and gonorrhea.

According to a report just compiled by the state health department, 15,186 patients were treated for venereal diseases from the time of the opening of the Center in March, 1944, until June 1, 1948. Of this total number 11,844 received treatment for syphilis.

The Center has been used by all of the fifty-five counties in West Virginia. In 1947, Wirt was the only county not making referrals. Patients are referred to the Center by private physicians and officials of local health departments.

INTERIM SESSION OF AMA IN ST. LOUIS

The 1948 Interim Session of the American Medical Association will be held in St. Louis, November 30—December 3. The mid-year meeting of the House of Delegates will be held November 29-30, and will be followed by a two-day session arranged primarily for general practitioners.

The annual meeting of secretaries and editors will be held in St. Louis immediately preceding the interim session.

The 1949 meeting of the American Medical Association will be held in Atlantic City. San Francisco has been selected for the meeting in 1950, and Atlantic City will again serve as host in 1951.

FOUR PREVENTABLE DISEASES DROPPED FROM LIST OF TEN LEADING KILLERS

Four preventable diseases, each one of which exacted a heavy toll in West Virginia twenty years ago, are no longer among the ten leading causes of death in this state.

The reduction in deaths from diarrhea and enteritis as well as typhoid fever is attributed by Dr. N. H. Dyer, state health commissioner, to an intensified program conducted during the past several years by the division of sanitary engineering of the state department of health. Closer supervision of the state's milk and water supplies, coupled with other sanitary measures inaugurated in 1933, has resulted in a reduction in the death rate from typhoid fever of 15.4 per 100,000 population in 1927 to 0.3 in 1947.

Control measures by public health authorities have undoubtedly contributed to the reduction of death from whooping cough and diphtheria.

The ten leading causes of deaths in West Virginia for the years 1927, 1937, and 1947, are listed in the following tables in the order of their magnitude with reference to the total number of deaths:

1927

Cause of Death	*Number of Deaths*	*Death Rate per 100,000 Pop.*
Accidents (all types)	1862	111.4
Diseases of the heart	1693	101.3
Pneumonia and influenza	1556	93.1
Tuberculosis (all forms)	1247	74.6
Nephritis	1177	70.4
Diarrhea and enteritis	1176	70.4
Cerebral Hemorrhage	916	54.8
Whooping cough	332	19.9
Typhoid fever	224	13.4
Diphtheria	137	8.2

1937

Diseases of the heart	3125	163.2
Pneumonia and influenza	2534	132.4
Accidents (all forms)	2053	107.3
Cancer (all forms)	1387	72.4
Cerebral Hemorrhage	1385	72.3
Nephritis	1273	66 5
Tuberculosis	995	52.0
Premature birth	740	39.7
Diarrhea and enteritis	397	20.7
Diabetes	283	14.8

1947

Diseases of the heart	4470	241.7
Cancer (all forms)	1947	105.3
Cerebral Hemorrhage	1542	83.4
Accidents (all forms)	1498	81.0
Pneumonia and influenza	1013	54.8
Nephritis	944	51.0
Premature birth	734	39.7
Tuberculosis	681	36.8
Diabetes	403	21.8
Arteriosclerosis	211	11.4

It will be noted that tuberculosis continues among the ten leading causes of death. However, improvement has been made, as this disease is in eighth place in 1947 as compared to fourth place in 1927. The reduction in deaths from tuberculosis is the natural result of an accelerated case finding program, better reporting of active cases by doctors, and the advent of modern therapy.

It is thought that the increase shown in deaths from diseases of the heart and cancer is due to the fact that West Virginia has a young average age and that there is much more accurate reporting of these diseases than was the case twenty years ago.

DOCTOR STEMMERMAN HONORED

Dr. Marguerite G. Stemmerman, of Huntington, who is associated with Dr. Thelma V. Owen in the Owen Clinic, in that city, has been cited by Pi of New York chapter, Elmira College, Elmira, New York, for membership in Phi Beta Kappa. The award is being made on the basis of research in various aspects of tuberculosis, particularly work on amyloidosis. Her recent efforts with Doctor Owen to publicize the needs of the mentally ill and educate the public generally concerning mental disorders also constituted a contributing factor in the award.

DR. WILKINSON HONORED BY MCV ALUMNI

Dr. Robert J. Wilkinson, of Huntington, was elected president of the Medical College of Virginia Alumni Association at the annual commencement exercises held in Richmond, in June. He succeeds Dr. Harry Lee Claud, of Washington, D. C. Dr. Alan J. Chenery, of Washington, was named president elect.

NATIONAL CONFERENCE IN CHICAGO

Dr. Frank J. Holroyd, of Princeton, was the first guest speaker on the program at the third National Conference of County Medical Society Officers, which was held June 20, at the Palmer House, in Chicago. His subject was, "The County Medical Society—Its Part in Medical Organization."

Doctor Holroyd is Conference chairman for West Virginia, and area chairman for the second district, which includes, Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia.

The fourth annual Conference of Presidents and Other Officers of State Medical Associations was also held on June 20, with Dr. L. Howard Schriver, of Cincinnati, presiding as chairman. Dr. Walter E. Vest, of Huntington, has served as a member of the executive committee of the Conference during the past year.

The second annual meeting of the Medical Society Executives Conference, an all-day affair, which was held at the Sheraton Hotel, June 23, was attended by over 50 members. Several speakers of national prominence appeared on the program, and the meeting was a success from every standpoint. Charles Nelson, executive secretary of the Ohio State Medical Association, was elected president. He will serve until June 1949.

W. VA. SECTION OF SOUTHEASTERN SURGICAL TO MEET IN SEPTEMBER

The annual meeting of the West Virginia Section of the Southeastern Surgical Congress will be held Friday and Saturday, September 3-4, 1948, at the Hotel Prichard, in Huntington. A general invitation to attend the meeting has been extended to the medical profession in West Virginia, Kentucky, and Ohio.

Dr. R. J. Wilkinson, of Huntington, is chairman of the state executive committee, and will be in charge of the meeting. He will preside during the presentation of the first two papers on Friday morning. The address of welcome will be delivered by Dr. Carl A. Hoffman, of Huntington, president of the Cabell County Medical Society, and Dr. Thomas Bess, of Keyser, president of the West Virginia State Medical Association will respond.

An interesting scientific program has been arranged for the two-day meeting, which will get under way September 3, at 9:30 A.M., and end at noon on Saturday, September 4. The program for Friday morning, September 3, includes an address, scheduled for ten o'clock, by Dr. Gilbert F. Douglas, of Birmingham, Alabama, president of the Southeastern Surgical Congress. He will discuss "Sterility as Related to Benign Lesions of the Uterus and Ovary."

Doctor Douglas will be followed on the program by Dr. E. Lyle Gage, of Bluefield, who will present a paper on "Surgery of the Sympathetic System."

Dr. J. Frank Barker, of Huntington, will preside during the presentation by Dr. Parke Smith, professor of urology at the University of Cincinnati, of the final paper of the morning session. He will discuss "Urological Problems."

The remainder of the program which will be presented during the meeting is as follows:

Friday Afternoon, September 3

2:00—"Pericardectomy for Chronic Cardiac Compression.—R. A. Griswald, M. D., Louisville, Kentucky. (Francis Coffey, M. D., presiding).

2:45—"Orthopedic Problems." — Claude B. Smith, M. D., Charleston, West Virginia. (William B. MacCracken, M. D., presiding).

Saturday Morning, September 4

9:00—"Carcinoma of the Uterus."—B. T. Beasley, M. D., Atlanta, Georgia. (Incoming state chairman presiding).

9:40—"The Cross-Eyed Child."—Arthur M. Culler, M. D., Columbus, Ohio. (Charles Poland, M. D., presiding).

10:30—"Carcinoma of the Breast."—A. Kyle Bush, M. D., Philippi, West Virginia. (C. B. Wright, M. D., presiding).

11:10—"Postoperative Pulmonary Complications."—M. L. White, M. D., Charlottesville, Virginia. (John German, M. D., presiding).

Dr. Lucien A. LeDoux, president of the Southern Medical Association, will be the guest speaker at the annual luncheon at the Hotel Prichard, September 3, at 12:30 P. M.

An open house is scheduled for the mezzanine at the Prichard, Friday afternoon at 5:00 o'clock, to be followed by the annual banquet at 7:00 o'clock, with Dr. James S. Klumpp, of Huntington, serving as toastmaster. Dr. Herbert Acuff, of Knoxville, Tennessee, past president of the Southeastern Surgical Congress, and president elect of the International College of Surgeons, will be the banquet speaker.

Officers for 1949 will be elected at an executive session of the members of the West Virginia section, which is scheduled for Friday afternoon, at four o'clock.

UNIVERSITY RECEIVES ANOTHER GRANT

The department of bacteriology and public hygiene of the West Virginia University school of medicine has received a research grant from the division of research grants and fellowships of the USPHS, to be used for the development of serological methods for the identification and classification of Actinomyces bovis.

According to Dr. E. J. Van Liere, dean of the school of medicine, the grant was made to Dr. John M. Slack, head of the department of bacteriology, who has been interested in this problem for several years.

The department of pathology also recently received a USPHS grant of $5,000 to be used for the purpose of expanding the present teaching facilities in the field of cancer.

STAFF CHANGES AT HUNTINGTON

Dr. Vincent J. Daly, of Ypsilanti, Michigan, has accepted appointment as clinical psychologist at the Huntington State hospital, and Dr. Chris J. Buscaglia, also of Ypsilanti, succeeds Dr. Edward K. Hawke, as a member of the medical staff at this state institution. Doctor Hawke recently resigned to accept appointment as superintendent of the Spencer State hospital.

Both of the new appointees have been serving as members of the staff of the Ypsilanti State hospital.

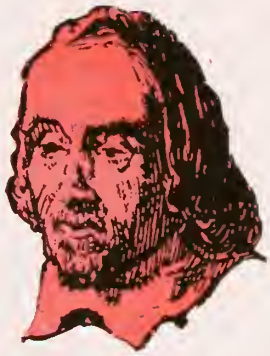
Doctor Daly served as a psychologist in the Army medical corps during World War II. He is a graduate of Oxford (England) University, and of the University of Berne, Switzerland.

DR. HARDING NAMED MEDICAL COLLEGE HEAD

Dr. Geo. T. Harding, clinical professor of psychiatry at the Ohio State University College of Medicine, and medical director of the Harding Sanitarium, at Worthington, Ohio, has been named president of the College of Medical Evangelists, in Los Angeles. He will take office September 1, 1948.

Doctor Harding, who is well known to the medical profession in West Virginia, graduated from the College of Medical Evangelists, in 1928. In addition to his other duties, he is at the present time serving as consultant in neuropsychiatry at the Children's hospital, Grant Hospital, and University Hospital, in Columbus. He is past president of the Columbus Academy of Medicine, and has served as councillor of the Ohio State Medical Association.

MILESTONES IN CARDIORESPIRATORY HISTORY



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Obituaries

AUBREY FRANCIS LAWSON, M.D.

Dr. Aubrey Francis Lawson, 61, of Weston, died at his home in that city June 20, 1948, following a sudden heart attack. He was ill but a few hours.

Doctor Lawson was born near Weston, and after graduating from high school in that city in 1905, enrolled at the College of Physicians and Surgeons, in Baltimore, receiving his M. D. degree in 1911. He was licensed to practice medicine in West Virginia that same year, and engaged in industrial practice at Widell, Bower, and Coalton, West Virginia, and then took post-graduate training in surgery at Mercy Hospital, in Baltimore. After completing his work in 1916, he located at Weston for the practice of his specialty of surgery.

He served as captain in the Medical Corps of the Army during World War I, being stationed in France for over a year. He returned to his practice at Weston in 1920. In 1927, Doctor Lawson and Dr. T. F. Law organized the Weston State Hospital. Doctor Law retired from hospital practice in 1927, and Doctor Lawson was the sole owner of the institution at the time of his death.

He was a member of the Central West Virginia Medical Society, the West Virginia State Medical Association, and the American Medical Association, and was a Fellow of the American College of Surgeons.

He is survived by his widow, Lottie (Vandervort) Lawson, a daughter, Mrs. J. R. Fitzpatrick, a son, John F. Lawson, and a sister, Mrs. Philip Babb, all of Weston.

BYRON WALLACE EAKIN, M. D.

Dr. Byron Wallace Eakin, 73, of Blacksburg, Virginia, died in a hospital in that City May 28, 1948. Death was due to carcinoma of the liver.

Doctor Eakin was born in Blacksburg, and received his academic training at Virginia Polytechnic Institute and Randolph Macon College. He received his M. D. degree at the University of Maryland School of Medicine in 1903, and was licensed to practice medicine in West Virginia that same year.

He engaged in industrial practice at Whipple from 1904 until 1918, when he moved to Tams, where he remained in active practice until his retirement a few years ago.

Doctor Eakin was an honorary member of the Raleigh County Medical Society, the West Virginia State Medical Association, and the American Medical Association. He had served as vice president and president of the Raleigh County Medical Society.

Of those attempting suicide, the older the person the more genuine and ominous the attempt. Alcoholism is the precipitating factor in forty to fifty per cent of these.—Detroit Medical News.

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M. G. STEMMERMANN, M. D., Medical Director

County Society News

CABELL

Dr. Julian R. Ruffin, of Duke University, Durham, North Carolina, was the guest speaker at the regular monthly meeting of the Cabell County Medical Society, held June 16, at the Hotel Pritchard, in Huntington. His subject was "Peptic Ulcer".

The speaker discussed the results of several surveys that have been made concerning the various aspects of peptic ulcer. A question and answer period followed the presentation of the paper.

At the business session following the scientific program, Dr. E. E. Shafer was elected to honorary lifetime membership.

The following doctors were elected to membership in the society: John Pearson, T. C. McFarland, Louis R. Chaboudy, W. W. Guthrie, and C. R. Terlizzi.

At the monthly meeting of the Cabell County Medical Society, held July 8, at the Hotel Prichard, in Huntington, Dr. W. Carl Kappes, of that city, presented a paper on "Treatment of Hyperthyroidism." The speaker reviewed the background and the present day treatment of the various types of thyroid diseases. The paper was discussed by Drs. James S. Klumpp, J. A. Guthrie, and William E. Irons.

The following resolution, submitted by the public policy committee, was adopted:

> Resolved: "That The Cabell County Medical Society will expel from membership for one year any member who accepts rebate upon optical goods, surgical or orthopedic appliances of any type, prescriptions, or who indulges in fee splitting."

Dr. Frederick E. Amick, of Huntington, was elected to membership in the society.

THOMAS B. BAER, M. D.,
Secretary.

* * * *

OHIO

The following officers have been elected by the Ohio County Medical Society, Wheeling, to serve during the ensuing year: President, C. G. McCoy; vice president, W. C. Boggs; secretary, P. V. Graham; and treasurer, A. J. Niehaus.

PAUL V. GRAHAM, M. D.,
Secretary.

DR. POINT NAMED OBSTETRICAL CONSULTANT

The division of maternal and child health of the state health department has announced the acceptance by Dr. W. W. Point, of Charleston, of appointment as part-time obstetrical consultant. He will assist the division in planning the state maternal and child health program.

THE MARMET HOSPITAL

MARMET, WEST VIRGINIA

Announces the opening of a new addition especially equipped to treat acute poliomyelitis in all its forms. This new addition includes twelve private rooms.

There is a separate Physical Therapy Department, under a competent physiotherapist, available for treatments of all types of orthopedic conditions at a reasonable cost.

Children's out-patient clinic every Tuesday morning.
Examination and treatment of orthopedic cases.

Apply to The Superintendent, The Marmet Hospital
Marmet, West Virginia.

E. Bennette Henson, M. D.
Medical Director

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Belle 94-842

NEW MEMBER OF CANCER ADVISORY COMMITTEE

Dr. W. W. Point, of Charleston, has been appointed by the public health council as a member of the advisory committee to the division of cancer control of the state health department. He was appointed to fill the vacancy caused by the death of Dr. J. Ross Hunter, of Charleston.

DOCTOR BOWYER HEADS VFW

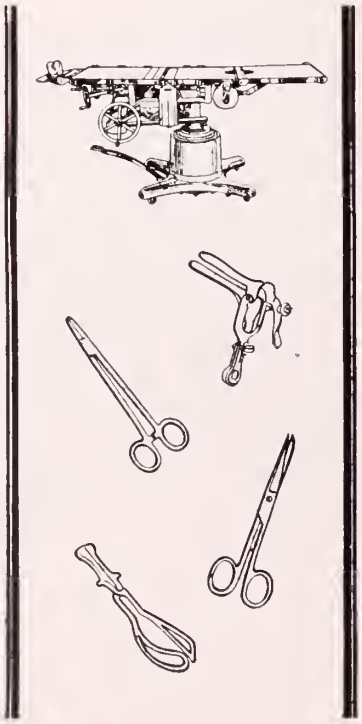
Dr. Arkie B. Bowyer, of Charleston, was elected commander of the West Virginia department of the Veterans of Foreign Wars, at the annual meeting held in Bluefield late in June. He succeeds James R. Davis, of Williamson.

DIAGNOSIS OF POLIOMYELITIS

It is convenient to discuss the diagnosis of poliomyelitis under the conventional headings of history, symptomatology, physical findings and laboratory data. A careful history as to the mode of onset and duration and type of symptoms is important from the point of view of differential diagnosis. Unlike many other acute communicable diseases, a history of exposure, or lack of it, to a previously known case is not very helpful. A history of another member of the family having been ill with an acute febrile illness some time within the limits of the incubation period may be of some significance, but the total number of cases which can be traced to direct contact with a known case is not very great. The incubation period is estimated to vary from four to seventeen days with an average duration of approximately ten days.

As a rule the onset of the disease is acute, with fever, headache, malaise and perhaps nausea and vomiting, an onset which differs little from that of many other acute infections such as tonsillitis, scarlet fever, influenza, etc. Either diarrhea or constipation may be present. The fever of poliomyelitis is usually of moderate degree averaging from 101 to 103 F. Temperatures above this at the onset of symptoms should make one suspicious that poliomyelitis is not the causative factor.

During the 1946 season many of us were impressed with the epidemic of sore throats which paralleled the poliomyelitis epidemic. The number of individuals who experienced such acute febrile illness was far greater than the number of poliomyelitis patients. While no proof was available, nevertheless it was difficult to escape the suspicion, at least, that these may have been actual infections with the poliomyelitis virus, but in which nature's defensive mechanism was successful in preventing the virus reaching the central nervous system. It would have been interesting to have had the means at hand to attempt to recover the virus from the throats or stools of some of these patients, or to have determined the presence of neutralizing antibodies from blood specimens at the time of the illness and several weeks later. Diagnosis of poliomyelitis in this possible subclinical or inapparent group cannot be made without the aid of such studies.—Lee Forrest Hill, M. D., in J. Iowa State Medical Society.



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HEART ASSOCIATION SCHEDULES MEETING

The fall meeting of the West Virginia Heart Association will be held at Morgantown, Friday, October 29. A scientific program will be presented in the afternoon and evening, and a dinner is being arranged in connection with the meeting.

Several doctors who plan to attend the meeting will stay over for the home-coming football game in the Mountaineer stadium the following afternoon.

Hotel reservations should be made without delay. If trouble is experienced in obtaining rooms, doctors should write to Dr. Fred R. Whittlesey, Morgantown, who will try to arrange satisfactory accommodations.

Dr. William A. Thornhill, of Charleston, is president of the Association, and Dr. Fred Richmond, of Beckley, secretary-treasurer.

INFANT MORTALITY UP TEN PER CENT

Resumption of the "Motherhood Correspondence Course" is about to be undertaken by the state health department, and letters concerning the availability of this service to all practitioners and health departments are being mailed to component societies of the West Virginia State Medical Association.

The purpose of reopening the course is to help practicing physicians to reduce the heavy loss in unborn and newly born babies, loss which at the present time finds West Virginia placed fourth from the bottom in infant mortality among all the states and territories.

The course was available before World War II, and was used extensively by mothers and prospective mothers upon the recommendation of their family doctors. Over 12,000 West Virginia women took advantage of the service in 1943, the last year it was in operation.

Statistics show that 69 per cent of all infant deaths in West Virginia during the past three years have been due to prenatal, natal, and immediate postnatal causes. Within the past five years the increase of these deaths has totaled nearly ten per cent. Deaths due to so-called "other causes" have been steadily decreasing.

A recent study made by the state health department discloses the fact that there are not more than twenty-five full-time obstetricians in this state, most of them being located in the larger cities.

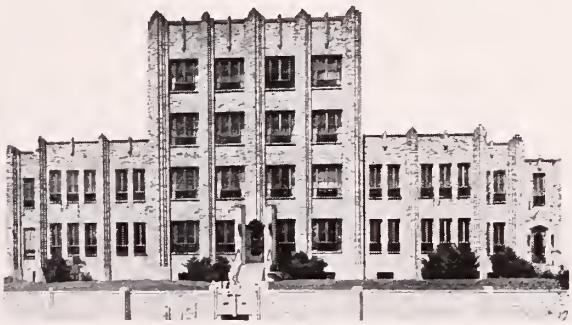
SUB-COMMITTEES AT WORK

Meetings of several sub-committees of the State Medical Association's fact finding and legislative committees are scheduled for late July and early August. Studies are being made particularly concerning the proposed four-year school of medicine in West Virginia, the reorganization of the state health department, and the revision of the medical practice act.

It is thought that sub-committees will be ready to submit reports, with recommendations, to key committees of the Association sometime in August.

The

MYERS CLINIC HOSPITAL



CLINIC STAFF

Radiology:
KARL J. MYERS, M. D.

Clinical Pathology:
E. E. MYERS, M. D.

Surgery:
HU C. MYERS, M. D.
LEWELL S. KING, M. D.

Gynecology and Obstetrics:
EDNA MYERS JEFFREYS, M. D.

Anatomic Pathology:
S. D. WU, M. D.

Internal Medicine:
IRVING J. HANSSMANN, M. D.; JOHN E. LENOX, M. D.

Resident Staff:
A. KYLE BUSH, M. D., Surgery
CORA C. LENOX, M. D., Medicine
MELVIN E. LEA, M. D., Surgery

☆ ☆ ☆

Pharmacist:
F. MERCEDES DURANT, B. S. Phar., R. P.

Director, School of Nursing:
CLIFFORD BURROUGHS, M. S., R. N.

Director of Nursing Service:
MARY R. CHAFFEY, R. N.

Chief Dietitian:
MARIAN T. McKENZIE, B. S., M. S.

Assistant Director of Clinical Laboratories:
GORDEN S. STARKEY, B. S., M. T. (ASCP)

Chief Laboratory Technician:
MARY VIRGINIA HILL

Chief X-ray Technician:
R. R. RATCLIFFE, R. T.

Business Manager:
E. R. DENISON

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DIAGNOSTIC AND THERAPEUTIC FACILITIES AT THE DISPOSAL OF ALL QUALIFIED PHYSICIANS

SOMETHING CAN BE DONE

In one respect Geriatrics is making significant and notable advance. Because a disease is incurable, or a deterioration irreversible, the idea that the doctor can do nothing, would be regarded in the future as a betrayal of the standards of the medical profession and the interests of the patient. Faced with any incurable or any of the normal deterioration of aging, the physician works for three things: alleviation, palliation and postponement. His method is characteristically one of support. For example, if a heart condition is incurable he will bring all the other organs, nutritional resources and hygiene program of the patient up to the highest efficiency. This gives the heart better service and less labor and also may remove one or more of the original and continuing causes of cardiac condition.

This gives the heart a chance to return to the organs longer and better service than before. The man is better, the heart is better. Many a man has become more active, more vigorous and happier after his first coronary attack by the use of this method. If one cannot restore the crippled organ, restore the man, he may "cure" his own heart. This is typical of the direction of advance in Geriatics. It applies to every organ and function.

Much can be done for the weakened or diseased and otherwise hopeless kidney, liver, pancreas, eye, joints, arteries and the mind of the ageing man by this procedure. Research is increasingly bringing out the fact that the illness of one organ is often due to failure of another and this in turn the result of yet a cause still more occult. This points to the importance of a thorough all-over examination of the whole patient in the presence of any chronic illness and also in the presence of no apparent illness at all.—C. Ward Crampton, M. D., in Bull. Med. Soc. Co. of Kings.

MORTALITY FROM GALLSTONES DECLINES

According to the Statistical Bulletin of the Metropolitan Life Insurance Company, the age adjusted death rate from gallstones among white policy holders (ages 1 to 74 years) dropped from 3.4 per 100,000 in 1936 to 1.7 per 100,000 in 1946, a reduction of 50 per cent. For at least fifty years prior to 1936, however, the death rate from this cause showed no improvement.

The recent decline benefited policyholders in each sex and at every age period of adult life; prior to age 35 the death rate from gallstones is practically negligible. The decrease in mortality was larger for women than for men throughout adult life. Nevertheless, the death rate among women is still more than twice that for men at almost every age period.

Undoubtedly, a substantial part of the recent reduction in the mortality from gallstones is to be credited to the widespread use of the sulfa drugs and penicillin in combating infections which may seriously complicate the original condition. At the same time there have also been advances in surgical techniques.

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TB, 1900-1946

The greater average length of life means a greater number of years lived. It might be interesting to calculate to what savings the increase is prinicpally due. The disease tuberculosis furnishes one of the best examples. In 1900 it was easily the leading cause of death. The mortality rate was 195 per 100,000 population. Forty-six years later, in 1946, the total number of deaths from the disease during the year was about 50,000, and the rate had dropped ot 36. Had the 1900 rate still held, the number of deaths would have been 273,000. The saving of life in that year was therefore 223,000. For the total 46-year period it has been calculated that approximately 5,000,000 lives were saved.

Allowing for increasing population, decreasing death rate, and average ages at death from tuberculosis and all causes, it is clear that between 1900 and 1946 many millions of years were lived that would not have been lived had the mortality rate for tuberculosis in 1900 been maintained.

The saving of life is not the only saving to consider. For every person who dies of tuberculosis in any one year, about four are alive and seriously ill with it. Using the same figures as before, and subtracting the calculated cases from the total that would have existed in 1946 had the 1900 rate prevailed, we find a saving in that year alone of 892,000 serious cases. Quite comparable calculations could be made for other diseases. —Esmond R. Long in Science.

ANTIBODY RESPONSE AFTER PROMPT TREATMENT

Immunity to those diseases capable of conveying it by a single attack is usually dependent upon adequate stimulation of antibody production by a specific antigen. The longer the stimulation the more effective is the immunity. For example, a lasting protection against future infection usually follows such diseases as measles, typhoid fever, diphtheria and other diseases in which specific antigenic substance is released into the blood or tissues of the infected host. In addition to the treatment applied in any of these diseases, antibody response to such stimuli is still a contributory factor to recovery and the production of active immunity. So it seems reasonable to assume that early and sustained treatment with potent specific antitoxin or chemotherapeutic or antibiotic agents will overcome the invader so promptly that this contributory factor will be impaired or destroyed.

In the search for reasons why we encounter so much diphtheria—and measles—in adults in recent years, the impression, which is not new, that this may be one of many explanations, is being considered more than ever before. In fact evidence has been obtained from a few studies that it is possible for chemotherapy to be so successful, and infection can be overcome so promptly that the normal defense mechanism does not have a chance to get started. Obviously under such a condition no immunity can be developed and a second attack may consequently be expected whenever such an individual is exposed at a later time.—Int. Med. Dig.

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It should be agreed that the voluntary hispital, which concerns itself not only with the care of the sick but also with the training of personnel, the conduct of research and the prevention of disease, is worthy of the increasing and continuing support of everyone in the community who is in a position to give financial assistance.

From the point of view of the patient served, the medical profession should exercise good judgment in limiting admission to patients who are actually in need of "in-bed" care. To hospitalize a person because he is a member of Blue Cross, or even because he can afford to pay for service, is uneconomic, unsound, and particularly unwise in that it deprives someone in more urgent need of the opportunity for medical or surgical treatment.—New England Journal of Medicine.

OUR GREATEST CHALLENGE

A whole new group of special weapons—atomic bombs, biological products, and chemical agents that science has made available—is projecting an unprecedented challenge to the medical profession and those associated with rendering service to the Nation in the event of another war.

The necessity of the medical profession's being ready and prepared for whatever national emergency arises is obvious. In the event of war the medical, health, and sanitary problems will be greater than ever before, because not only will they involve the armed forces but whole civilian poulation as well.

Happier contemplation of the fact that man has apparently found the basic source of power should lead the world to hope that the newly acquired knowledge might be applied to the problems of disease control and similar difficulties for a new era in human existence.—Edward L. Bortz, M. D., in Pennsylvania Medical Journal.

ONE HUNDRED YEARS AGO

The doctor one hundred years ago knew little of the causes of disease; his mission was to cure his patient if he could, and to relieve suffering as much as possible. The general practitioner was a heart specialist, lung specialist, stomach specialist, and skin specialist, all in one. Death always lurked around the corner. Typhoid came regularly every spring and every fall. Scarlet fever and influenza took their annual toll. The only treatment the physician knew for pneumonia was to wrap the patient in blankets and give him fresh air. Infant mortality was deplorably high. Aseptic surgery was unknown and would have been scoffed at had any radical to suggest it. Those were the days of the *vis medicatrix naturae,* the natural impulse of living tissue to remove disease or repair injury.—I. H. Neece, M. D., in Ill. Medical Journal.

TOOTH-PICK SWALLOWERS

Persons who wear false teeth make up a large percentage of the tooth-pick swallowers who must undergo surgery.—J. F. in Ohio State Medical Journal.

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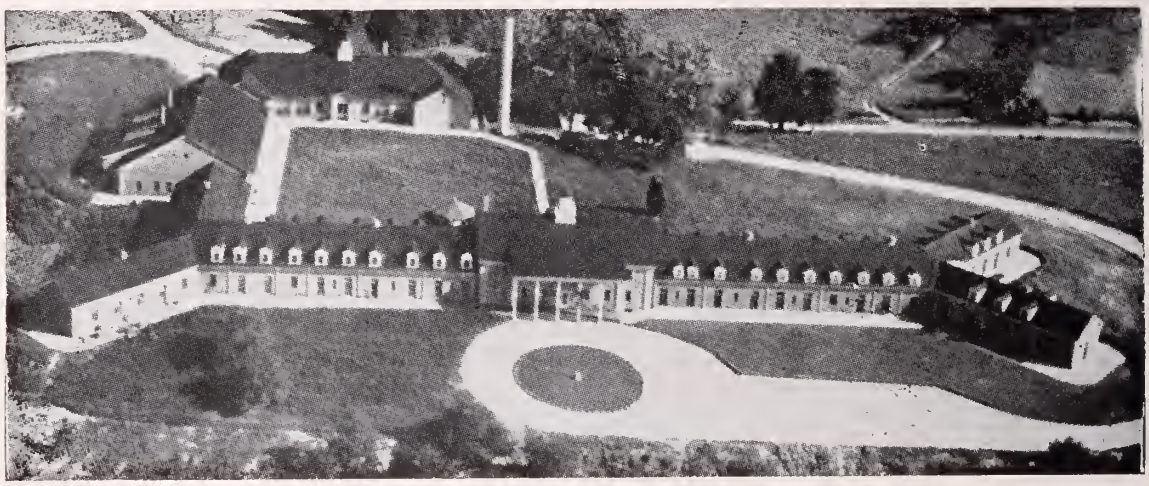

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HYPERTENSION TODAY*

(Part I)

By MAX KOENIGSBERG, M. D.,
Charleston, W. Va.

Hypertension as referred to in this paper is of the so-called 'essential' or primary type: that group into which most cases fall, the cause of the disease still being idiopathic.

The term 'essential' when used to describe hypertension is a recognized misnomer. In discussing the etiology of 'essential' hypertension[1] the suggestion was made that the disease be reclassified into (1) primary (idiopathic) hypertension, and (2) secondary hypertension, based on demonstrable organic changes in tissues secondary to pyelonephritis, glomerulonephritis, diabetes, hyperthyroidism, et cetera. It was pointed out that this terminology is logical and follows the classification pattern of the anemias.

In a conference on experimental hypertension held by the Section of Biology of the New York Academy of Sciences early in 1945 even the etiology of experimental hypertension in animals could not be agreed upon. Page,[2] in his opening remarks, stated, "Essential hypertension is not alone a disease of the heart, or the kidneys, or the brain, but rather a systemic process, damaging any tissue to greater or lesser extent as that tissue's blood vessels suffer morbid changes". As for the pathology of primary hypertension, the original thesis of Bright in 1836, i. e., that the primary disease lies in the kidney, is not as well accepted today as it has been in the past. The more recent work of Goldblatt[3], although experimental in nature does lend considerable support to Bright's original hypothesis. He attempted, by constriction of the main renal arteries with a special silver clamp, to simulate the intrarenal arteriolar and arterial sclerosis of primary hypertension. This method was used since obviously it is impossible to reproduce experimentally in animals the arterial and arteriolar sclerosis of human primary hypertension. Goldblatt believes that this constriction (not occlusion) of the main renal arteries produces a reduction of the intraglomerular capillary pressure which simulates physiologically the intrarenal arterial changes of primary hypertension. More recently still[4], he concludes: "The many similarities between human essential hypertension associated with renal vascular disease and experimental renal hypertension suggest but do not prove that the former may also be of renal origin . . . Because the probable primary significance of renal arterial and arteriolar sclerosis has been indicated by experimental studies, the cause of vascular disease has now become the most important problem in the future investigation of the pathogenesis of hypertension." On the other hand, Goldring and Chasis[5] feel that hypertension and the organic vascular diseases, renal included, may well be the result of a primary humoral mechanism of idiopathic nature and that the renal component may contribute a secondary and accessory effect.

The various theoretical mechanisms of primary 'essential' hypertension may be well illustrated[6] (table 1).

*This is the first of a series of three papers on hypertension prepared for publication in The Journal. The second will appear in the October issue.

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Whatever primary etiologic factor may be discovered eventually, it is agreed that in the terminal stages of severe hypertension the pathology basically is a widspread arterial, and especially arteriolar, disease. According to Rosenberg[7], the brain often is seriously damaged in malignant hypertension (diffuse arteriolar disease, grade 4). He expresses the opinion that probably no vital organ except the kidney is more uniformly or more extensively involved by this disease, hemorrhage and infarction being the two major pathologic processes. Kernohan[8] states: "When we first worked on the problem of hypertension several years ago, there was some doubt whether it was a diffuse vascular disease or whether it was limited to certain organs and tissues. It was also doubtful whether the vascular lesion was degenerative or proliferative. Some workers believed that hypertension usually was secondary to glomerulonephritis and rarely a separate entity. Some considered the thickening of the wall of the blood vessels the cause rather than the result of the high blood pressure. Prior to 1929 there was no method of accurately expressing the degree of thickening of the walls of the arterioles, the result of this thickening on the lumina and also the secondary effect on the various organs and tissues. The actual measurement of the walls and the lumina of a large number of arterioles with the change in the ratio of wall to lumen was the simplest method of expressing the alteration mathematically. During the last ten years various workers in the (Mayo) Clinic have studied practically all the important organs in the body and we have just reported the results of some of these studies. *It is now obvious** that hypertension, and especially malignant hypertension, is a diffuse, vascular disease and that it affects various organs in different degrees. One important question in relationship to hypertension has not been answered, viz: Are the changes in the arterioles reversible, and if not, at which stage in their development can progress be halted so that the vessels can return to normal?"

It therefore behooves us as practicing physicians to attempt to forestall these arteriolar changes and protect these tissues even after organ changes occur, since the latter predispose these patients to cerebral hemorrhage, retinopathy, coronary disease and uremia.

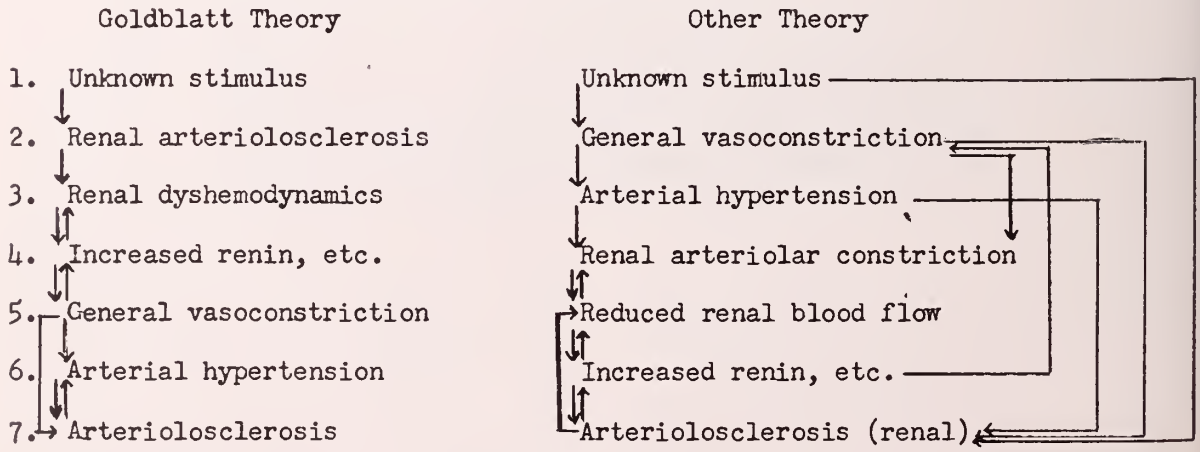
Of a carefully selected series of 40 cases of primary (idiopathic) hypertension Taylor and Page[9] state that 19, or 47.5 per cent, died of cerebral hemorrhage; 10, or 25 per cent died of congestive heart failure; 4, or 10 per cent, died of coronary occlusion with myocardial infarction; 2, or 5 per cent, died of renal failure. The remaining five patients, or 12.5 per cent, died of causes other than hypertension. The average age for the group of patients who died of cerebral hemorrhage was 46.8, for the others, 50.3.

The advocates of the drugs and dietary methods to be discussed sincerely believe that the mortality figures can be reduced in a large percentage of cases and that the morbidity most certainly can be forestalled in others. The procedures to be listed are of a medical nature and will not include potassium thiocyanate therapy, of which much already has been written.

Each patient must be evaluated from a cardiac, cerebral (eyegrounds) and renal viewpoint rather than by simply taking a blood pressure reading. It is only by following a well syste-

Table I

Mechanism of 'Essential' Hypertension



*Italics ours.

matized procedure that one can arrive at a correct diagnosis of primary hypertension and avoid the pitfall of treating a patient for primary hypertension who later turns up with chronic pyelonephritis, a polycystic kidney, coarctation of the aorta, or other pathologic change to which the hypertension is secondary. Backer[10] suggests an excellent plan for examination of any patient who shows a significant rise of arterial tension: (1) family history, (2) individual history, (3) physical examination, (4) urinalysis, (5) blood serology, (6) flat roentgen-ray plate of the chest, (7) electrocardiography, (8) nitroglycerin test, (9) exercise tolerance test, (10) kidney function test, and (11) urography plus special urologic investigation if indicated by the results of the other examinations. There are, of course, other procedures indicated at times but the foregoing routine can be carried out in the office of most practitioners without too great an expenditure of the physician's time and with no great cost to the patient.

The value of psychotherapy in arterial hypertension has been well summarized by Binger[11] who recognizes its importance in the abatement of symptoms such as fatigue, headache, palpitation, dizziness, shortness of breath and the fear which they beget. He agrees, however, that as yet there is no proof that psychotherapy can reverse the physiologic process or modify the outcome of either malignant or benign arterial hypertension.

RUTIN

Rutin, like hesperidin, is a flavone glucoside and the two are very similar in structural arrangement. The chemical formula of rutin is $C_{27}H_{30}O_{16}$. $3H_2O$. Hesperidin has been shown by Szent-Gyorgyi[12] and others to have a beneficial effect on abnormally fragile capillaries, at least in certain cases. A deficiency of this factor seems to produce an increase in capillary fragility which may be manifested in persons with hypertension by petechial hemorrhages in the retina, skin, or cerebral vessels. Griffith[13] and his co-workers have shown that rutin has the property of decreasing capillary fragility in cases in which the fragility is found to be above normal. It might be emphasized at this point that rutin should not be given routinely in all cases of hypertension but that a petechial index, using the Gothlin test, should be determined on each. The procedure for the Gothlin test follows:

> (1) Mark off a circular area, 6 cm. in diameter, in each antecubital area. Mark off all blemishes and marks in this area that might later be confused with petechiae. (2) Place a standard blood pressure cuff about each upper arm, and maintain in each a pressure of 35 mm. of mercury for 15 minutes. Lower the pressure, count and mark all petechiae within the two circular areas, using a good light and a magnifying lens of 5D or its equivalent. (3) One hour or more later, repeat, using a cuff pressure of 50 mm. of mercury.
>
> The petechial index is calculated as follows: To the number of petechiae occurring at 35 mm. of mercury multiplied by 2 add the additional number occurring at 50 mm. The normal is 8 or less; increased is 13 plus; borderline, probably increased 9 to 12.
>
> In order to save time, the second stage can be omitted under the following conditions: (1) The number of petechiae after the first stage are 2 or less. Such persons may be considered normal. Usually, this is true also if the petechiae after the first stage are 3, but not invariably. (2) The number of petechiae after the first stage is 6 or more. Such persons may be considered abnormal. (3) The test is a repetition, and may be compared with the corresponding first stage of an earlier test.
>
> The second stage should always be done if it is a first test and the number of petechiae after the first stage is 4 or 5. It should be done also in most cases when the number after the first stage is 3.

On completion of a study of 1,600 patients with hypertension Griffith and Lindauer[14] drew the following conclusions: (1) increased capillary fragility (measured by the method of Gothlin) occurred in about 18 per cent; (2) hemorrhagic complications such as apoplexy and retinal hemorrhage are more common in persons with increased fragility; (3) increased capillary fragility usually can be reduced to normal by rutin and patients so treated appear to be protected against apoplexy and retinal hemorrhage so as to become comparable with the originally normal group. Unfortunately, separation of an untreated control group was considered unjustified.

MacLean and Bramble[15] believe that dicumarol and rutin are of value in the treatment of persons with retinovascular disorders, and conclude: "The validity of our conclusions, i. e., that dicumarol and rutin possess therapeutic value in venous thrombosis and the absorption of retinal hemorrhages, depends on the admission that the return of absorption of such blood extravasations in the patients here reported was greater and more rapid than would have been observed had no treatment been given. Without clinical or laboratory controls, it is obviously impossible to verify this point. It was our opinion, however, that the absorption of the hemorrhages was decidedly more rapid than would have been expected in untreated cases. Especially is this true in the diabetic cases reported." They summarize:

"1. Long-term administration of dicumarol has been used efficaciously in central and tribu-

tary retinal occlusion, diabetic, degenerative, and central serous retinopathies.

"2. *Rutin has been found to decrease capillary fragility and has been used with benefit in recurrent retinal and vitreous hemorrhage.*

"3. An increased clotting tendency has been observed in all of our cases of vascular retinopathies. This is manifested by a decrease in the prothrombin clotting time for diluted (12.5%) plasma.

"4. Improvement in visual acuity has been accomplished in this series by maintaining the prothrombin activity between 50 and 60 per cent of normal up to a period of six months or more.

"5. Sufficiently significant results have been obtained to warrant further clinical evaluation of dicumarol and rutin in ophthalmology."

The dosage recommended is 20 mg. three times a day. However, Lindauer[16] believes that if the Gothlin index is not altered within several weeks on the 20 mg. dosage, the dosage should be increased to 50 mg. three times a day. The Gothlin test should be repeated every three weeks until it is normal, after which it should be made every three months.

I wish to stress that rutin should not be given indiscriminately to every person with hypertension and that the action sought in the use of this drug is not the lowering of the blood pressure but rather the decreasing of the capillary fragility. The advocates of this drug recommend its continued use for at least one year after a normal Gothlin index is reached, especially in individuals who have had a cerebral or retinal hemorrhage. Rutin has been found to be of value also in cases of diabetic retinitis. Likewise, rutin therapy has been used in hereditary hemorrhagic telangiectasia.

During ten months of postgraduate study at the University of Pennsylvania, I was able to observe closely the use of rutin in the medical clinic conducted by Griffith and Lindauer who did the original experimental studies on rutin. A far more favorable clinical impression is gained by observing the patients and studying their case histories than one gathers from statistics. Moreover, Doctor Griffith was kind enough to supply me with rutin until it became available commercially, and since June 1946, I have prescribed it in over fifty cases without its having caused any toxic effects. Furthermore, of the hypertension patients under my care, many of whom had the disease in a severe form, only one has sustained a retinal or cerebral hemorrhage. I am therefore convinced clinically that the drug most certainly is indicated when the Gothlin index is above normal. It is an interesting sidelight, although perhaps purely coincidental, that in the case of the one patient in whom retinal hemorrhage developed, the hemorrhage took place when rutin was stopped on account of an intercurrent illness (pneumonia).

Although the entire story of this medication has not been written, its use is certainly indicated in consideration of the high percentage of persons with hypertension who die of cerebral hemorrhage and the great number of individuals that are seen with retinovascular disorders.

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It is estimated that there are over 7,000,000 persons in the United States disabled by diseases of the heart and arteries, 6,850,000 from rheumatism and arthritis, and 2,600,000 from orthopedic conditions.—Howard A. Rusk, M. D., in N. Y. St. J. Med.

INDUSTRIAL MEDICINE COMES OF AGE*

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Concomitant with the change of status of the American worker, there has been a metamorphosis within recent years in industrial health practices and methods. Recognizing the demands of modern industrial enterprises for a manpower capable of maintaining ever-rising production schedules, medicine has attempted to offer a program capable of keeping the healthy worker healthy and on the job. Within-plant medical care schemes of two or three decades ago have grown in scope to become the rich preventive medicine services seen in present day enlightened industry. This demand for better health maintenance of the worker obviously was increased by the exigencies of war, but fortunately, the methodologies developed by the industrial health forces have persisted in the peacetime state and are meeting with studied refinements.

Many lessons were learned from the accelerated industrialization of the war years in the field of matching man and machine. The factory employee was seen as more than a piece of equipment used in turning out the finished product. He was a living being in need of proper job incentives, counselling at times of stress, rewards at the slump periods of low morale, and a health program that would render him fit to meet the long schedules mandatory for military success. Caught between management's cries of paternalism, and labor's denunciations of neglect, industrial medicine was forced to produce a program whereby the individual applying for a job could be sized up physically and placed in suitable work, maintained in optimal health while at that work, and be treated and cured when illness or injury beset him. From this hurriedly devised concept of medical care in the factory and plant has emerged the present day scheme, built on several solid component parts, of guarding the worker's health.

SELECTIVE PLACEMENT

Hiring procedures of many years ago frequently saw two varieties in approach. There was the within-the-family apprentice system where son learned the trade of father and followed him into industry. The second was the "I'll take you, you, and you" school where the misfits, the untrained, and the inept were given employment only to have increased labor turnover, absenteeism, occupational injuries and impaired efficiency result. Not wanting these undesirable side-effects of mass hiring, and needing literally millions of men, industry turned to personnel research for the answer to the question, "How do we get the best of the potential manpower?" The answer came in selective placement, spearheaded by Bert Hanman, wherein the negative philosophy of considering a prospective worker in the light of his physical defects gave way to recognition of his physical capacities for the job. To utilize these capacities one had to know the physical demands on the worker, and so developed the job analysis and the resultant matching of the worker and the job. Thus, the square peg was fitted to the square hole and successful employees were found among a large group considered previously as not physically qualified.

Today, through close liaison between personnel and medical directors, hiring is carried out with an understanding of both the applicant and the job. The former interests us here, for the present day preplacement physical appraisal has eliminated the shoddy "heart, lungs, blood pressure and hernia check" of former days. In our laboratory, for example, the complete examination consists of the following procedures:

1. Organ inventory and examination.
2. Personality appraisal (Cornell Index).
3. Audiogram.
4. Visual acuity (Ortho-Rater examination).
5. Complete blood count.
6. Urinalysis.
7. Serodiagnostic test.
8. Electrocardiogram (aged 40 or over, or when indicated).
9. Wax finger ridge impression.
10. Chest film.
11. Spine film (for laborious trades).

From a study of the results of these examinations, an excellent concept is had of the individual's physical and emotional capacities and when he is recommended for work it is done with certainty and complete objectivity. With all this, rejection figures have been but 1.2 per cent truly an enviable record, and the complete answer to the trade unions which, perhaps rightfully in the past, believed the examination in industry to be a powerful discriminatory weapon to which they had no redress. The appraisal conducted in this manner at the beginning of employment, allows a thorough understanding of the individual, and provides prognostic information whereby one can watch for early signs

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of neurotic illness, accident-proneness, and dispensary visit recidivism. In brief, one must know the worker well, in order to follow his health pattern throughout his working life.

CASE-FINDING PROCEDURES

Through the assembly daily at a common work site of thousands of workers, the development of programs of case-finding in industry has become possible. In fact, it is in this situation that the greatest impetus has been given the searching out of specific diseases on a mass scale. The inclusion of a preplacement chest film in the employment process was common to but a few enterprises. With the growth of industry during the war the United States Public Health Service, through the Tuberculosis Control Division, began its program of mass radiography, and saw it materialize into a screening procedure covering millions of people not only at work, but non-industrial urban groups likewise. Today, most industrial health services equipped with x-ray facilities either secure chest films at an established frequency on all employees, or conduct an annual survey, using one of the various types of minature film available.

That this screening process has proved of worth is seen in the figures of positive cases discovered, which will range from 1.5 to 3 per cent in any industrial group surveyed. Of outstanding recollection to the writer was the survey conducted at a wartime port of embarkation where, out of 16,000 individuals examined through use of the 4 inch by 10 inch photofluorogram, 2.5 per cent of the employees were found to have pulmonary tuberculosis. Following re-check with 14 inch by 17 inch chest film in any survey, active cases are referred to physicians or chest clinics for definite diagnosis and therapy. Inactive cases, or workers with healed, re-infection phase tuberculosis are observed through additional studies at indicated intervals.

In comparable manner, the conducting of Kahn or other serodiagnostic tests on a large scale is extremely feasible in industry, and ordinarily in mixed racial groups about 2.5 per cent of persons, likewise, will be found to have latent syphilis. On corroboration from second tests these workers are referred to private practioners, or if marginal income allows to venereal disease clinics for the institution of follow-up care. There is a reason for these mass studies. Primarily, of course, isolation of a contagious disease is mandatory when so many possible plant contacts exist. One must remove a public health menace. Secondarily, it well can be anticipated that undetected chronic illness is going to cause, at one time or another, lost working time, repeated dispensary visits, impaired working efficiency, and eventual socio-economic disruption of the wage-earner's family. Through these seeking-out procedures carried on by the industrial health department, some planning in the maintenance of family unity can be effected. Through a liaison between the medical director and the community agencies a complete follow-through can be effected so that maximum advantages will accrue the worker, and some integrated thought will be given the dependents.

Of lesser importance from the point of view of contact, is the survey accomplished in industry of the visual capacities of the worker. Industrial ophthalmology, prior to hostilities, was a specialty that devoted itself almost exclusively to the after-the-fact, barn-door-closing principle. Its members removed foreign bodies from the eyes of the worker, cared for his arc flash conjunctivities resulting from exposure to welding radiations, and looked after his chemical burns. This field, under the enthusiastic leadership of Dr. Hedwig S. Kuhn of Hammond, Indiana, has developed into the line of thinking of all other preventive medicine services. Now, through the use of accurate testing equipment, the visual capabilities of a worker can be determined with a much greater feeling of confidence than during former years which saw the badly worn and badly illuminated Snellen chart undergoing most uncritical use. These findings, in a manner similar to the job matchings described previously, are then compared with the visual demands of the specific occupation, and in the event of mismatching, either other job placement will be effected, or special occupational eyewear will be issued in heat treated, correction-bearing safety lenses. As an example, there are many industris requiring work distances of perhaps 8 inches; for these specific tasks, occupational glasses will be given and used, but will serve no non-occupational visual purpose.

In much the same way, frequent re-checking surveys of aural acuity are carried out, not only to determine initially the presence of hearing defects, but to follow the progression of hearing loss, and to aid in proper placement, so that those positions demanding acute hearing will not be filled, for example, by workers with nerve deafness. Also, for workers employed in noisy areas, the most vivid example being the gunnery sergeant, early detection of hearing loss is possible. Frequent electrocardiographic checks on workers aged forty or over are important, particularly in executives, because of the well known correlation between personality pattern

and cardiovascular breakdown. In summary, industry invests its capital for profit. To attain this goal, a smoothly functioning working group is required. But the human machine, like its inanimate brother, will break down, will require maintenance, or will need function restoration. Survey methods will isolate these defects before harm will result to the individual and before his fellow worker will be effected comparably. Industry has the opportunity to execute the maximum, then, in true preventive medicine.

HUMAN RELATIONS

It has been pointed out by sociologists that one of the unfortunate aspects of our modern technology is that young executives going into large commercial endeavors have undergone, as preparation for this venture, technical training in their particular specialty, be it engineering, business administration, chemistry, metallurgy, or instrumentation. They neither have been taught the most important fundamental of successful industry, the handling of men, nor have they acquired this through elbow rubbing while growing up in the shops. From this inadequacy in indoctrination have resulted the many sins seen in large plants such as fractures in supervisor-employee relationships, lack of recognition of work accomplished, insufficiency of status symbols (no telephone, a stand-up desk, et cetera reprimands before subordinates, absence of clarifying policies or procedures, disinclination of management to listen to complaints or suggestions, poor promotion policy, ad infinitum. Into the group living of industry there comes an admixture of workers from varying state origins, with different social, economic, religious, and educational backgrounds, of complex racial stocks, and carrying with them hundreds or thousands of years of occupational experience. These ingredients are mixed in the melting pot of the factory or plant, and from this conglomerate is supposed to emerge a harmonious, smoothly working, single purpose, cooperative production unit. Obviously, there are going to be clashes in personalities, philosophies, temperaments, individual objectives and ideologies resulting from pre-existing sexual, racial, or capitalistic prejudices.

Such is the picture facing management. And management extends veritably down to the one individual who tells one other what to do. The daily goings-on of industry present stresses and strains—these, in turn, produce conflicts and one encounters problems in employee relations. Current managements are not equipped to envision rsolution of these difficulties because of the emphasis on the technical curriculum previously noted, and most of the excellent war-born departments of employee counselling have not seen continuation into the contemporary industrial scene. The task of solving these problems has, therefore, fallen on the medical director because he is on of the few remaining who have an understanding of the counselling approach and interviewing technics, ,and who also have had a neutral feeling toward the foreman and the employee. The director has had to do, perforce, some of his own psychiatry because of the paucity not only of psychiatrists in the country at large, but of the very few who have interested themselves in psychiatry in industry. In addition, the alert director will be on the lookout not only for the effects on the worker's personality of the clash of man and machine, and man and man, but for psychosomatic disorders which, when studied with an etiologic eye, may stem from the same rupture in interpersonal relations. The days are gone when the individual presenting evidence of neurotic illness is told, "go back and forget about it—it's only your imagination," or "it's your nerves", or "you're just jumpy", or "get some rest, and everything will be all right". When one thinks of the bottles of sedative solutions dispensed to patients in past years, when no effort was made to join the psyche to the soma, one can blush with shame for the therapeutic neglect.

The more progressive health services in industry have recognized these situational conflicts and have added psychologists or psychiatrists to their staffs in order to do a better job in keeping the worker well, be it physically or emotionally. The day will come, it is felt sure, when the psychiatric social worker will be considered as necessary an adjunct to the health department staff as the laboratory technician is now. In the meantime, industrial medicine has taken over the reins, and by attempting counselling and psychotherapy within recognized limits, has effected solution of many of the personnel "hot spots" that were beyond management's handling.

REHABILITATION

The results most gratifying to the industrial physician in his health maintenance efforts are those seen following active rehabilitation of the physically impaired worker. The job performed by the handicapped has been demonstrated repeatedly as being the equivalent of, if superior to, that accomplished by the nondisabled. At times, however, the crippling defect may preclude promotion or improvement of job status because of inability to meet the physical demands of the particular job to which the ambitious employee

aspires. Through a close contact with the Office of Vocational Rehabilitation, maintained by both federal and state appropriations, these individuals who have become job frozen have been referred for rehabilitation. In turn, they have been given corrective medical, surgical, or psychiatric care by the best practitioners available locally, and have returned to employment and health, and work status betterment. Another manner in which this is accomplished is by means of the preplacement physical appraisal. If a disqualifying defect is found, such as hernia in a machinist applicant, his job often can be held for him, and following reparative medical attention he returns as a solvent worker, an asset to both the employer and himself. An outstanding example of this was the case of a 27 year old male who desired work as a chemical operator. He presented evidence of osteomyelitis of the radius, of 13 years' duration, in the form of a draining sinus. With such an open wound he was not eligible for the position he desired and referral for rehabilitation was accomplished. In three weeks he returned to us with complete skin continuity, and was placed on the job. We had a good worker, the employee regained his health and lost a good part of his feeling of physical inferiority, an orthopedist benefited, and the Office of Vocational Rehabilitation had expended its funds wisely. Industry, in finding these individuals, about whom the Selective Service physical fitness alarmists became much exercised, is re-integrating valuable workers into an economic medium, and so progress is made.

OTHER ACTIVITIES

Without details, one might mention the programs in health education conducted in industry that spread health information to the worker *and* his family. By teaching health and not medicine to the laity, the medical director can instill within the employee a knowledgeable approach toward illness and injury prevention.

A recognition of the human factor in occupational injuries by medical personnel in the plants has started a campaign directed towards safety engineers of rechanneling their thinking away from the mechanics of an accident towards the personality defect of the accident victim. Studies of any group of accident repeaters will disclose the concurrent existence of emotional upsets of varying severity.

The splendid cooperation offered by the industrial hygienists and industrial hygiene engineers has allowed eradication of occupational illness, and the adoption of the light-shedding philosophy that there is no occupational health hazard that cannot be controlled. The excellence of the health protection activities in the atomic energy plants has been bespoken by the absence of radiation injuries.

PROFESSIONAL STATUS

In the process of coming of age, the accepted concomitants of a specialty status have appeared, although there is still ardent disagreement as to the exact inclusions in industrial medicine. The internist has claimed that to be a skilled industrial physician one must have a training in internal medicine. With comparable vigor, the surgeon, the public health officer, the dermatologist, the industrial hygienist, the statistician, the psychologist, the hospital administrator, and the rehabilitation specialist, have all maintained that elements of their particular disciplines should enter into the preparation of the young physician for a career in health maintenance in industry. Recognizing the broad scope of the specialty, the American Medical Association[1] has stated, "Residencies and fellowships in this field [occupational medicine] should be organized in the light of the principal components of occupational medicine: health conservation, occupational medicine and surgery, environmental hygiene and administration." With the formulation and approval of the criteria for Approved Residencies and Fellowships, plans are now under way for establishing facilities for fellowship and resident training. These are preliminary steps toward the eventual creation of an American Board of Occupational Medicine. Other agencies working in this direction have included the American Academy of Occupational Medicine, the Council on Industrial Health of the American Medical Association, and the American Association of Industrial Physicians and Surgeons.

The formation of professional groups that can meet for the cross fertilization of ideas is almost always one of the first activities of two or more inlividuals interested in the same pursuit. Several such associations have been organized and have been holding extremely successful meetings for many years. Obviously, the growth of industrial health activities during the war augmented greatly the membership rolls. These groups are as follows: Aero Medical Association of the United States, National Safety Council, American Conference of Governmental Industrial Hygienists, American Association of Industrial Nurses, American Association of Industrial Dentists, American Association of Railway Surgeons, National Council on Rehabilitation, and National Rehabilitation Association.

Table I
TEXTS ON INDUSTRIAL MEDICINE AND INDUSTRIAL HYGIENE

Author	Title	City	Publisher	Date
Brandt, A. D.	Industrial Health Engineering	New York	John Wiley & Sons	1947
Bridges, C. D.	Job Placement of the Physically Handicapped	New York	McGraw-Hill Book Co.	1946
Cantarow, A. and Trumper, M. R.	Lead Poisoning	Baltimore	Williams & Wilkins Co.	1944
Collier, H. E.	Outlines of Industrial Medicine Practice	London	Edward Arnold & Co.	1943
Dallavalle, J. M.	The Industrial Environment and Its Control	New York	Pitman Publishing Corp.	1948
Drinker, P. and Hatch, T. F.	Industrial Dust	New York	McGraw-Hill Book Co.	1936
Hamilton, A.	Industrial Poisons in the United States	New York	Macmillan Co.	1925
Hamilton, A. and Johnstone, R. T.	Industrial Toxicology	New York	Oxford Univ. Press	1945
Hazlett, T. L.	Introduction to Industrial Medicine	Chicago	Industrial Medicine Publishing Co.	1947
Hilleboe, H. E. and Morgan, R. H.	Mass Radiography of the Chest	Chicago	Yearbook Publishers, Inc.	1945
Hueper, W. C.	Occupational Tumors and Allied Diseases	Springfield	Chas. C. Thomas	1943
Hunter, D.	Industrial Toxicology	Oxford	Clarendon Press	1944
International Labour Office (Vols. 1 & 2 & Supplements)	Occupation and Health	Geneva	International Labour Office	1930-1944
Johnstone, R. T.	Occupational Diseases	Philadelphia	W. B. Saunders Co.	1942
Johnstone, R. T.	Occupational Medicine and Industrial Hygiene	St. Louis	C. V. Mosby	1948
Kessler, H. A.	Accidental Injuries	Philadelphia	Lea & Febiger	1941
Kessler, H. A.	Rehabilitation of the Physically Handicapped	New York	Columbia Univ. Press	1947
Kober, G. M. and Hayhurst	Industrial Health	Philadelphia	P. Blakiston's Son & Co.	1924
Kuhn, H. S.	Industrial Ophthalmology	St. Louis	C. V. Mosby	1944
Lanza, A. J.	Silicosis and Asbestosis	New York	Oxford Univ. Press	1938
Lanza, A. J. and Goldberg, J. A.	Accidental Injuries Industrial Hygiene	New York	Oxford Univ. Press	1939
Legge, T.	Industrial Maladies	London	Oxford Univ. Press	1934
Lehmann, U. V. and Flury, F.	Toxicology & Hygiene of Industrial Solvents	Baltimore	Williams & Wilkins Co.	1943
MacNally, W. D.	Toxicology	Chicago	Industrial Medicine Publishing Co.	1937
McGrath, B. J.	Nursing in Commerce & Industry	New York	Commonwealth Fund	1946
National Tuberculosis Assoc., Committee on Tuberculosis in Industry, Gardner, L. U., Ed.	Industry, Tuberculosis, Silicosis and Compensation	New York	National Tuberculosis Assoc.	1945
Reed, J. V. and Harcourt, A. K.	The Essentials of Occupational Disease	Springfield	Chas. C. Thomas	1941
Resnick, E.	Eye Hazards in Industry	New York	Columbia Univ. Press	1941
Sappington, C. O.	Essentials of Industrial Health	Philadelphia	J. B. Lippincott	1943
Sappington, C. O.	Medicolegal Phases of Occupational Diseases	Chicago	Industrial Health Book Company	1939
Sappington, C. O.	Industrial Health	Chicago	Industrial Commentaries	1939
Schwartz, L., Tulipan, L. and Peck, S. M.	Occupational Diseases of the Skin (2nd edition)	Philadelphia	Lea & Febiger	1947
Stern, B. J.	Medicine in Industry	New York	Commonwealth Fund	1946
Trail, R. R., Trenchard, H. J. and Kennedy, J. A.	Mass Miniature Radiography	London	J. & A. Churchill, Ltd.	1943
U. S. Public Health Service, Div. of Indust. Hygiene, Natl. Institute of Health, Gafaffer, W. M., Ed.	Manual of Industrial Hygiene	Philadelphia	W. B. Saunders Co.	1943
Vernon, H. M.	Health in Relation to Occupation	London	Oxford Univ. Press	1939
Wampler, F. J.	The Principles & Practice of Industrial Medicine	Baltimore	Williams & Wilkins Co.	1943
Woodward, L. E. and Rennie, T. A. C.	Jobs and the Man	Springfield	Chas. C. Thomas	1945

As the need for selfexpression cannot be limited to vocalizations among a group always willing to preach its specialized gospel, a literature has grown that has presented the best in thinking of the field. The most recent publication to appear has been the monthly *Occupational Medicine*, first offered by the American Medical Association in January 1946. *Industrial Medicine* dates back to 1932, and other journals currently in use include: *Journal of Industrial Hygiene and Toxicology*, Williams and Wilkins Company, Baltimore, *Industrial Nursing*, Industrial Medicine Publishing Company, Chicago, *Industrial Hygiene Newsletter*, Industrial Hygiene Division, United States Public Health Service, Federal Security Agency, Washington, D. C., *Industrial Hygiene Quarterly*, Industrial Medicine Publishing Company, Chicago, and *British Jonrnal of Industrial Medicine*, British Medical Association, London.

Paralleling the field of journals have been many recognized standard texts, and these may be seen in table 1. Others, in addition to the aforementioned, are now in preparation.

This, then, demonstrates briefly the growth made by industrial medicine over and above the commonly accepted and long recognized emergency medical care for painful or distressing symptoms presented at work. The day of the lone, superannuated, anaphrodisiac nurse wrapping fingers in a dismal corner of the factory has been relagated to the collection of interesting memorabilia. Forces of industrial health personnel are at work now, in the plants, the factories, the large commercial enterprises, and government and state agencies, directing their efforts towards the single goal of converting these sites into "safe places to work." Industrial medicine, from its neutral position between management and the employee, ever will dedicate itself to the maintenance of the health of the worker for it is he, as a well being, who makes America's vast industrialization possible. This, therefore, is the medical activity in which we find so much fascination, so much allure—and so much to challenge our social conscience.

SUMMARY AND CONCLUSIONS

1. Wartime developments in industrial health methodologies have allowed extension of withinplant preventive medicine procedures into the peacetime production scene.

2. Through a concept of selective placement, workers are matched against jobs (physical capacities against physical demands), allowing not only full employment of nearly 100 per cent of applicants, but complete understanding of the worker resulting from physical appraisal, laboratory examinations and personality estimate.

3. Case-finding surveys have been developed in industry in order to detect tuberculosis, syphilis, early heart changes and alterations in visual and aural skills.

4. A knowledgeable understanding of the human relations involved in the group living of industry has led to resolution by the medical director of worksite situational conflicts, providing management with a better method of reveresing impaired employee relations.

5. The introduction of rehabilitation procedures, through the cooperation of industry and the Office of Vocational Rehabilitation, has made for job betterment of the physically limited employee and for the hiring of those with disqualifying defects.

6. Integration of the activities of industrial hygienists, industrial nurses, coupled with health education efforts, has led to an enrichment of the industrial health services.

7. Industrial medicine has given further evidence of coming of age by the creation of a specialized literature, the establishment of criteria for fellowships and residences, and the formation of professional organizations.

8. Through the continued efforts of industrial medical personnel and the preventive medicine procedures introduced by them, full worker health will be maintained, and America's program of expanding industrialization will grow.

REFERENCE

1. Council on Medical Education and Hospitals of the American Medical Association: Essentials of Approved Residencies and Fellowships, J. A. M. A. 90:922 (March 24) 1928, revised to June 1947.

TREATMENT OF PATIENT PRIMARY MISSION

If we, as physicians, are to meet the needs of our patients, we must know something about rehabilitation and selective placement of the handicapped. We must interpret to our patients the findings of the specialist in words that are simple and understandable. The burden of translating to the patient the nature and extent of his disability falls upon the family doctor. That explanation cannot be in medical terms of the disability alone but must be in terms of its effect on the vocational, social, economic, family, and personal life of the patient.

We must deal with the practical relationship of disability to economic, social, and environmental factors. We must realize that the treatment of disease or disability is only a segment of our problem; our primary mission is the treatment of the patient.—Howard A. Rusk, M. D., in N. Y. St. J. Med.

PROSTATISM*

By LLOYD G. LEWIS, M. D.,
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Symptoms and secondary pathologic changes produced by obstruction at the vesical orifice may or may not be in proportion to the actual prostatic enlargement. As a general rule, the most severe degrees, of renal damage, bladder diverticulosis and vesical calculus formation are noted in patients with long standing fibrosis of the orifice without palpable evidence of glandular enlargement. Therefore, it is evident that patients should be referred for special urologic investigation because of symptoms of obstruction as well as for evaluation of actual prostatic enlargement.

Mechanics of Obstruction. The mechanical concepts of prostatic obstruction are comparable to the three well known methods of obstructing the flow of water through a rubber tube. Kinking of a garden hose is accomplished by a small boy as efficiently as by a man. The boy can apply his thumb to the end of the hose as well as his father. But the adult can accomplish more by stepping on the hose than his small son. Fibrosis or median bar formation effectively places a kink in the urethra at the vesical orifice. The Albarran, or pedunculated median lobe acts as a ball valve at the vesical outlet. Compression of the posterior urethra by the two lateral prostatic lobes requires great enlargement of the gland. It immediately becomes obvious, however, that any combination of the three methods of obstructing the urethra may occur simultaneously. Therefore, we find subtrigonal median combined with lateral enlargement. pedunculated median or pedunculated anterior lobe obstruction with lateral hypertrophy.

Pathology. The three pathologic conditions effecting vesical orifice obstruction are [1]fibrosis caused by infections, [2]muscular or glandular hypertrophy or hyperplasia, and [3]carcinomatous involvement. The first may occur in younger individuals before the age of adenomatous prostatic enlargement. The second is practically limited to an older age group. Carcinoma causes prostatic obstructive symptoms only if the cancer invades the vesical neck or develops concomitantly with adenomatous enlargement.

For practical purposes, the prostate gland can be divided into two portions: the pre-spermatic (female) and the postspermatic (male). Actually, adenomatous prostatic enlargement is not prostatic hyperplasia but a growth of the periurethral glandular mass. The true prostate glands which lie posterior and lateral to the ejaculatory ducts, do not as a rule undergo adenomatous enlargement. They are, however, the usual site of development of prostatic cancer. These true prostate glands have long ducts which drain from the anterior commissure and lateral portions of the gland through the posterior lamella into the urethra anterior to the openings of the ejaculatory ducts. When the periurethral glands undergo adenomatous change and become enlarged, the posterior lamella of the true prostate gland becomes displaced laterally and posteriorly, also thinned out. Adenomatous prostatic enlargement may involve any one or any combination of the five anatomic lobes: the two laterals which enlarge to compress the uretha into a slit-like channel and elongate the urethra from the veru to the vesical orifice, the subtrigonal median portion which elevates the trigone and vesical orifice, the Albarran or subcervical median lobe which, because of its location, is forced upward through the orifice into the bladder as a ball valve, and the anterior commissural lobe likewise.

Symptoms. Symptoms of prostatic obstruction are: acute urinary retention without previous symptomatology, or chronic obstructive urinary retention. The former occurs in patients without median bar or median lobe involvement. The large lateral lobes acutely swell due to systemic disease and congestion, forcing the urethra to close, causing sudden complete retention. These patients may void well after a single catheterization but obstruction will eventually recur and require removal of the obstructing lobes. Chronic obstructive symptoms from median bar or median lobe formation follow a fairly set pattern. The patient first notices gradually increasing nocturia. This symptom is due to reduced bladder capacity caused by thickening of the bladder wall thus making a less freely distensible elastic bag. Frequency ensues within a period of months followed by urgency. The hypertrophied bladder muscle responds more powerfully to reflex stimulation. Delay in starting the urinary stream means considerable vesical orifice obstruction so that the longitudial fibers of the detrusor and the trigone require additional time to pull the orifice upen. Intermittency soon follows. The muscles tire and time is required to allow them to recover before the orifice can be reopened for emptying of urine. At this stage of symptomatology, a residuum of urine is the rule and we can say that the bladder muscle has become decompen-

*Presented before the Cabell County Medical Society, at Huntington, West Virginia, September 11, 1947.

sated. From this point on we may assume that the symptoms, nocturia and frequency, are caused by lessened working capacity of the bladder although the actual capacity may be larger than normal. Eventually urinary retention ensues unless operative relief of the obstruction is accomplished. Symptoms of uremia are relatively late in prostatism and whereas prior to 1930 uremia was a common symptom and sign of prostatism, it no longer prevails due to the integrity of the practitioner and the skill of the urologic surgeon. Uremia is included in the definition of prostatism as "a morbid state of mind and body due to prostatic disease".

Urologic Examination. Special urologic examination will reveal not only the degree of prostatic enlargement, the degree and type of obstruction, but also scondary changes in the bladder, uterers and kidneys. An early sign of prostatic obstruction, with or without prostatic enlargement, is hypertrophy of the bladder musculature as evidenced by the thickened bladder wall or trabeculation seen in the cystogram or noted on cystoscopic observation of the urinary bladder. Later, manifestations of cellule or diverticulum formation and residual urine are detected.

Renal function tests by means of phenolsulfonphthalein or urea clearance determinations are routine. We believe the phenolsulfonphthalein test to be more useful in obstructive uropathy if the fractional test is used. Obviously, residual urine in the bladder or in hydronephrotic sacs makes this test of less value. A catheter must be used if residual urine is present. One cubic centimeter of the dye is given intravenously. The intramuscular method of administration is inaccurate if circulation is impaired. The appearance time of the dye in the urine is of importance. If the patient has no residual urine, he may void into a receptacle containing an alkaline reagent such as anhydrous sodium carbonate or sodium bicarbonate. Sodium hydroxide should not be used because of the danger of spilling the strong alkali on the patient's skin or scrotum. The dye should appear within five minutes in a voided specimen, within three or four minutes from the urethral catheter, and within two or three minutes from a ureteral catheter. A normal, young, healthy individual should secrete from 50 to 60 per cent of the dye within thirty minutes. Older individuals may average 35 to 50 per cent in the first half hour. If the first half hour test is normal, further collections are not essential but if the first half hour specimen is subnormal, half hour specimens up to two hours are required. For a safe surgical prognosis, we require at least 25 per cent in the first half hour and the first half hour specimen must exceed in quantity of dye the second half hour specimen.

Elevated blood urea, urea nitrogen, nonprotein nitrogen or creatinine are evidences of renal failure and the prognosis is more grave. Such patients require bladder drainage to eliminate back pressure against the kidneys. Prior to 1930, the majority of patients with prostatism required drainage before surgery could be carried out safely. Now, we rarely have to institute preoperative drainage, either by catheter or suprapubic tube.

The general state of the patient's health, his circulation, pulmonary condition and allied conditions must be thoroughly studied and treatment, as indicated, carried out preoperatively.

Is cystoscopy required in the routine work-up of the patient with prostatic symptoms? Prior to the development of excretory urography, observation of the bladder, vesical orifice and the posterior urethra was considered necessary. Hematuria remains a very definite indication for cystoscopic study. Otherwise, we do not do cystoscopy as a routine preoperative procedure. Excretory urography serves as an excellent means of estimating renal function. This physiologic method of examination allows visualization of the upper urinary tract, and by use of the delayed film technic an excretory cystogram is obtained. The thickness or trabeculation of the bladder may be measured. Cellules and diverticula are made evident. The degree of actual intravesical enlargement may be measured and elongation of the posterior urethra observed by the elevation of the vesical orifice from its normal location. A film made after the patient urinates will give information regarding residual urine. Elevation of the juxtavesical portion of the ureters in the typical fishhook pattern means great prostatic enlargement. Obviously, this method depends upon adequate kidney function and it is useless in a patient with markedly elevated blood nitrogen.

Treatment. Treatment of prostatic obstruction by hormone therapy deserves our serious consideration. In cases of cancer, reduction in the size of the tumor, partial relief of obstructive symptoms, relief of metastatic pain and improvement in the general physical condition of the patient may be expected. However, this form of therapy is palliative rather than curative. Even orchiectomy does not alter the condition permanently. In cases of fibroadenomatous prostatic enlargement, relief of symptoms may occur in a small percentage; however, the me-

chanically obstructing tissue remains in a position to cause further bladder and kidney damage. The surgical approach to prostatic obstruction of any type is the best form of treatment that we know of today.

Permanent relief of obstructive symptoms and restoration of bladder and renal function require complete removal of the obstructing tissue. Partial resection or removal of tissue will not relieve symptoms nor prevent further kidney damage. Infection will not clear spontaneously nor are drugs of much use if residual urine persists.

The method of removal of obstructing prostatic tissue continues to be of great interest to urologic surgeons. The development of anesthesia, surgical asepsis, urinary antiseptics and antibiotics allows the urologist a wide choice of operative procedures. With the exception of prostatic cancer, all obstructive tissue at the vesical orifice and around the posterior urethra can be removed either transvesically, transurethrally, or perineally. Cancer limited to the prostatic capsule can be removed by the perineal route. The newly developed retropubic approach has been used mainly for removal of greatly enlarged glands and in a few instances for total prostatectomy. The successful employment of any of the aforementioned procedures depends upon the physical condition of the patient, the preoperative preparation, the skill of the surgeon and adequate postoperative care. Each method has its merits and its complicating factors. Renal failure is no longer a serious postoperative complication in the light of adequate preoperative preparation of the patient. Infection is no longer the first cause of mortality in view of the development of antiseptics and antibiotics. Hemorrhage, in spite of improved technics and new methods of hemostasis, remains a serious problem.

Surgical shock, hemorrhage (both primary and secondary), abdominal distention and infection are the most common complications of suprapubic prostatectomy. Hemorrhage (both primary and secondary), sepsis and urethral stricture are the most common complications of transurethral surgery. Impotence and surgical accidents (rectal injury) complicate the perineal route and osteitis pubis is the most common drawback to retropubic prostatectomy.

By training and experience most urologists have a preference for one of the operative procedures. Many have been trained or have acquired experience in performing all methods with dexterity. We prefer to use the most suitable method for each particular patient. In cases of huge intravesical benign prostatic enlargements in the younger age group in good physical condition, we prefer a one stage suprapubic prostatectomy. In patients requiring cystostomy drainage, a secondary suprapubic enucleation is usually considered safe. For median bars and the smaller adenomatous enlargements, either intravesical or intra-urethral, we do transurethral resection. We do not deliberately plan transurethral resection when complete removal would require more than one hour. For large prostates in the older age group and particularly for bad surgical risk patients, we prefer perineal prostatectomy because it can be done with minimum anesthesia, with the greatest speed, with the least blood loss, and because it is followed by early ambulation. The last named is now accomplished after any method. For large adenomatous prostatic lobes, the retropubic route seems most adequate and will be the method of choice in a larger number if the complicating factor of osteitis pubis can be solved.

The mortality from prostatectomy is no longer a serious threat. The marked reduction in mortality within the century is, in our opinion, due to the fact that the patient now seeks relief of obstructive symptoms early, that the practioner refers the patient for urologic investigation before serious complications set in, and that the urologic surgeon has developed technics suitable for complete relief of the obstructing tissue. There is little reason for palliation today. Even severe cardiac disease does not contraindicate removal of prostatic tissue. The operative mortality rate for prostatectomy today is very little higher than that normally expected from systemic disease in a comparable age group. We have fortunately had no hospital deaths in the past two years, yet three of our patients who had had electrocardiographic evidence of coronary disease preoperatively, died one month, eight months and one year, respectively, following discharge from the hospital. Two had perineal prostatectomy, the other transurethral resection.

Results. What can be expected as the result of adequate prostatic surgery? First, complete relief of obstructive symptoms within three months, relief of nocturia and frequency, a free flowing urinary stream under good control, and complete reduction of residual urine. Second, spontaneous clearing of urinary tract infection. Third, restoration of kidney function to normal or at least to the degree allowed by the circulatory condition of the patient. Impotence is not always of secondary importance to the patient suffering from prostatic obstruction. After suprapubic or transurethral surgery, the power of

erection is not disturbed but the patient may not ejaculate for several months after removal of tissues from a widely dilated vesical orifice. After perineal protatectomy, impotence may ensue. The cause of this is not understood since no nerves are divided and no vital structures cut. Occasionally, a patient in the younger age group may remain potent after conservative or even total perineal prostatectomy but one cannot promise this with any surety. After total perineal prostatectomy and seminal vesiculectomy for early cancer of the prostate, urinary control may return immediately postoperatively or within six months. Two out of twenty-seven of my patients have slight incontinence on heavy exercise, the rest have perfect urinary control. The cure rate for early cancer of the prostate by Young's total perineal prostatectomy is 70 per cent. Young has reported 50 per cent but in his series from the Brady Urological Institute, many extensive lesions were removed and the recurrence or metastatic rate in such a series would be higher.

CONCLUSIONS

1. Symptoms of prostatism, damage to the urinary bladder and kidneys, may or may not be in proportion to the actual prostatic enlargement.

2. Mechanical obstruction to the passage of urine through the vesical orifice is brought about by kinking (elevation of the vesical orifice by median bar or subtrigonal lobe enlargement), corking (ball valve subcervical median or anterior lobe enlargement) or compression of the uretha by enlarged lateral lobes or by any combination of these principles.

3. Obstruction results from fibrosis due to infection, fibroadenomatous enlargement of the periurethral glands or carcinoma.

4. Symptoms vary according to the type of mechanical obstruction. Chronic obstructive symptoms such as gradually increasing nocturia, frequency, urgency, hesitancy, intermittency, difficulty and finally retention are always associated with median involvement. Acute retention without previous symptoms is typical of great enlargement of the lateral lobes without median involvement.

5. Special urologic examination is indicated when the patient presents a history of prostatic obstruction. The secondary changes in the urinary bladder and kidneys are studied by means of excretory urography, renal function tests and observation of the urinary bladder.

6. Hormone therapy is a very effective palliation in late prostatic cancer but as yet we have no medicinal means of preventing or effectively treating fibroadenomatous enlargement.

7. Permanent relief of obstructive symptoms and restoration of bladder and kidney function require complete surgical extirpation of obstructing tissue; in cases of fibroadenomatous enlargement, complete removal of the periurethral glandular tissue between the veru and the vesical orifice is necessary; in cases of cancer, total prostatectomy must be carried out.

SURGERY IN HYPERTENSION

A new test which helps doctors of medicine tell in advance whether or not an operation to relieve high blood pressure will be successful, is now being developed and used as a welcome means of avoiding unnecessary operations.

Though it is not yet 100% accurate, the method has already proved helpful. It is based on the action of a drug called tetraethylammonium chloride in blocking the functions of certain sympathetic nerves.

Because these are the nerves which ordinarily control the automatic expansion and contraction of the blood vessels, the drug temporarily has the same effect as an operation in which these nerves are cut. Its results thus can reasonably be expected to duplicate the results which would be obtained if the operation were performed. By this means the probable benefits of the surgery can be judged.

The operation is used in cases of hypertension or high blood pressure, where it is felt that the excessive pressure is due to overactive control and contraction of the blood vessels by the nerves. But since there may be other factors than this nerve control—structural changes in the walls of the blood vessels—for instance—that may cause the restricted opening of the vessel, the operation has not always been beneficial. The new drug offers a more exact means of pre-determining these results.—Michigan State Medical Society's "Health News."

RESEARCH IN CANCER

At the present time, the most widespread and dreaded disease is cancer. It is outstanding among mysterious afflictions as to its origin and stealthy progress. Why normal body cells should develop into unexplained multiplicity and attain the characteristic term malignant has never yet been discovered.

It is universally recognized that successful treatment of this malady depends upon early diagnosis and application of survery, roentgen therapy and radium treatment. There is abundant reason to believe that medical science will sometime solve these problems. Never before have such contributions been received from governmental and private resources as have in recent time been distributed to research workers in this field of investigation.

In many parts of our nation as well as in other countries, this cancer problem is being attacked with the most scientific and meticulous investigations that can possibly be applied to it. The world awaits a successful result of these widespread endeavors.—Northwest Medicine.

RUPTURED DISSECTING ANEURYSM OF THE ASCENDING AORTA WITH HEMOPERICARDIUM IN A TWENTY-FOUR YEAR OLD MALE

By ROBERT U. DRINKARD, M. D., and GEORGE L. ARMBRECHT, M. D., Wheeling, West Virginia

During recent years many reports of dissecting aneurysm of the aorta have appeared in the literature. In the majority of cases a history of cardiovascular disease could be established. It usually occurred in the older age groups ranging from age 40 onward. Schnitker and Bayer[1] recently have reported a series of 141 cases in which the patients' ages ranged from 4½ to 40 years.

Our case of rupture of the ascending aorta with dissecting aneurysm in a 24 year old male is presented because of the youth of the individual, the absence of previous cardiovascular disease, the paucity of microscopic pathologic findings in the aorta, the relationship of the acute onset of symptoms to physical exertion, and the coincidental presence of early treated syphilis.

CASE REPORT

The patient, while lifting a heavy tree stump into a truck July 14, 1947, was seized with a sudden, severe pain in the midsubsternal region. Approximately two minutes later he collapsed and was unconscious for a short time. On regaining consciousness he tried to walk and again collapsed.

When first examined three hours following the incident, he complained of a constant vise-like pain over the midsternum, which subsided at times to be replaced by intermittent sharp pains radiating across the entire anterior portion of the chest.

The patient was apprehensive, exhibiting moderate gray cyanosis but no other signs of vascular collapse. The pulse was strong, the pulsations 80 per minute; the blood pressure was disastolic 100 and systolic 170. There was sinus arrhythmia and a diastolic murmur heard along the left sternal border.

On admission to the Ohio Valley General Hospital, the blood pressure was 160 systolic and 70 diastolic, the pulse rate 120, respirations 20, and temperature 99.2 F. Positive physical findings were confined to the cardiovascular system. The apical impulse was quite forceful and located in the fifth intercostal space, 9 cm. from the midsternal line. Over the left sternal border best heard in the third intercostal space was a long, soft diastolic murmur. There was marked sinus arrhythmia; peripheral pulses were forceful with no Corrigan quality noted.

Roentgenogram of the chest made with the patient in bed showed no evidence of pulmonary disease. Estimation of the size of the heart and the aorta was not made since a standard 6 foot film could not be taken. Electrocardiographic findings were negative except for sinus arrhythmia. Urinalysis showed the specific gravity to be 1.024, also a trace of albumin. Hemoglobin was 85 per cent (Sahli); erythrocytes 4,000,000; leukocytes 15,400; polymorphonuclear 76; lymphocytes 19; monocytes 5. The blood Mazzini was positive (4 plus), the quantitative Kolmer-Wassermann 4-4-4-4-4-0.

Information obtained from the patient's army physical records was to the effect that on induction into the service in April 1944 the cardiovascular system was normal, the chest roentgenogram normal, and the blood pressure 120 systolic and 60 diastolic. In June 1946, on separation from the army, the record showed the cardiovascular system to be normal, the chest roentgenogram normal, the blood pressure 142 systolic and 74 diastolic, and the Kahn test negative.

On November 16, 1946, a positive darkfield examination was reported on a penile lesion in the hospital outpatient department. The Wasserman reaction was negative, the Kahn test positive in dilution 1:40. The spinal fluid showed one cell Pandy's test was negative, protein 26 mg., and colloidal gold negative. Rapid treatment of syphilis was administered at the Kanawha Valley Medical Center, Charleston, West Virginia. Treatment consisted of 0.3 Gm. mapharsen, 0.6 Gm. bismuth, and 4,200,000 units of penicillin over a fourteen day period. In December 1946, the Kahn test was positive in dilution 1:20, and the Hinton and Wassermann positive (4 plus). On June 19, 1947, the Kahn test was positive in dilution 1:10, and the Hinton positive (4 plus).

Initial hospital treatment consisted of oxygen, general supportive measures, and morphine and atropine for pain.

On the second day of admission the substernal distress became more intense, the pulse rate rose to 180 per minute, respiration to 40, and the blood pressure was 145 systolic and 60 diastolic. At this time it was noted that the pain apparently was accentuated on respiration; precordial pulsations were extremely forceful; heart sounds were unchanged; cyanosis and shock were absent. Following an injection of demerol 150 mg.,

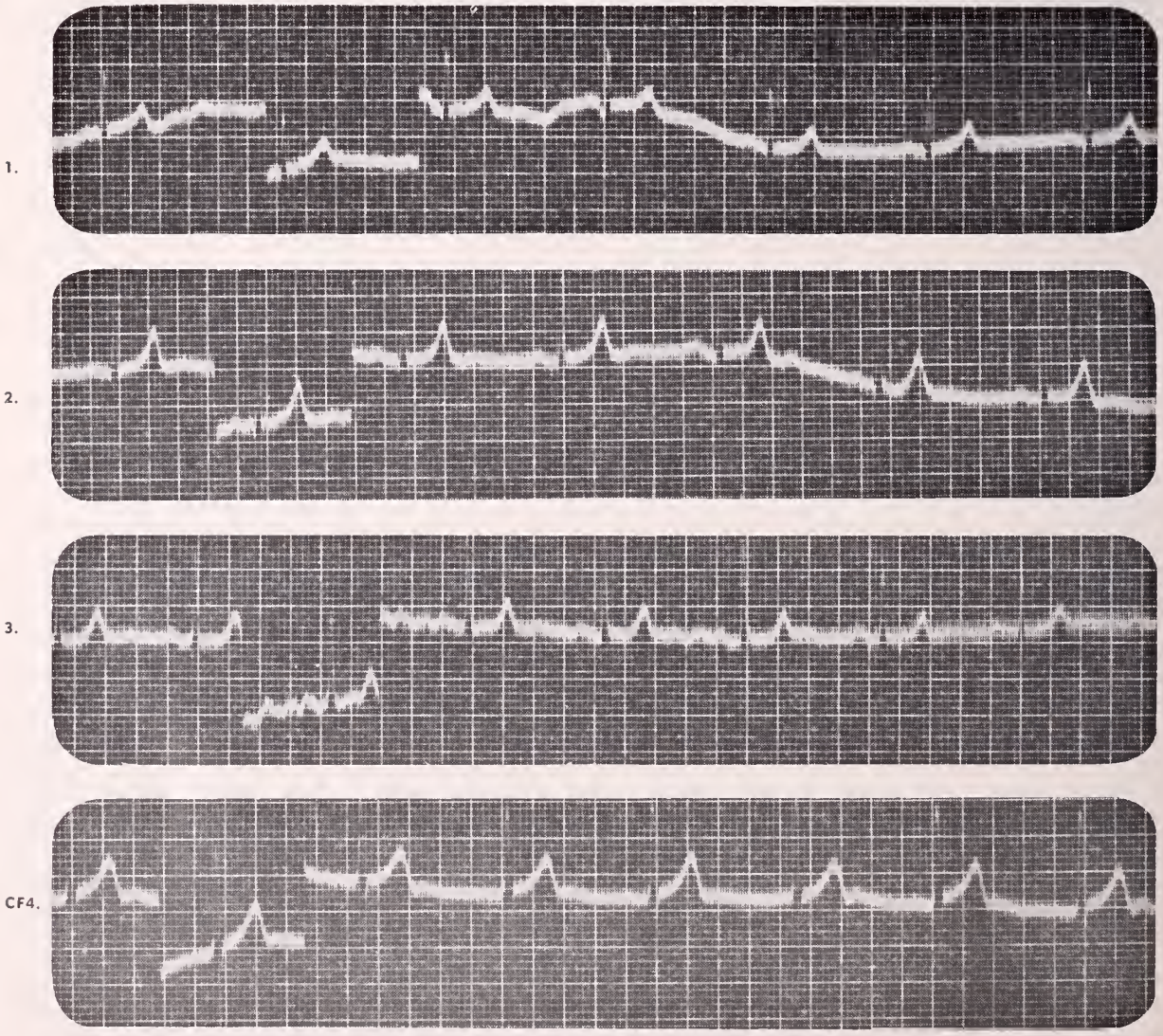
the pulse rate fell to 120 and respiration became slower and easier. The patient complained of numbness in both forearms and hands and perspired profusely. During the next twelve hours the pain and numbness disappeared and respiration became normal.

On the third day the patient was seized with severe upper abdominal and substernal pain lasting eight hours then subsiding completely. On the morning of the fourth day respiration suddenly became labored, gray cyanosis developed, and death ensued within a few minutes.

FINDINGS AT AUTOPSY

The pericardium was tense and distended, measuring 17 cm. transversely and 15 cm. longitudinally. The pericardial space was filled with fluid blood and soft clot, slightly adherent to the epicardium. The heart in situ was normal in size with a smooth epicardium. The root of the aorta was deeply congested and moderately dilated. Careful examination of this portion showed a small perforation in the posterior wall. There were patches of fibrin over the posterior aspect of the ascending aorta.

On opening the heart, examination showed a 1 inch longitudinal tear in the aorta posteriorly 1 inch above the aortic cusps. This tear communicated with a dissecting aneurysm involving the base of the aorta. The external wall of the aneurysm was formed by thin soft adventitia and the inner wall by the media. The linear tear in the intima and media was at the same level as the perforation in the adventitia. The remainder of the aorta was smooth and atheromatous areas were not seen. The aortic, pulmonary, and tricuspid valves were normal. At the edge of the mitral valve near the attachments of the chordae tendineas there was a small subendocardial hemorrhage. The myocardium was



Electracardiogram of case of dissecting aneurysm showing normal tracing.

normal in consistency and color and the pulmonary vessels were not remarkable.

Photograph of heart showing linear tear one inch above aortic valves.

The lungs, liver, kidneys, pancreas, adrenals, and gastrointestinal tract showed no pathologic changes. Death was due to hemopericardium following rupture of a dissecting aneurysm of the ascending aorta produced by a linear rupture of the intima and media.

Microscopic section from the inner wall of the aneurysm at the site of the tear showed occasional capillaries about which there was infiltration with lymphocytes, mononuclears, and occasional polymorphonuclear leukocytes. In the outer wall there was congestion of the vascular spaces of the media and adventitia. The inner part of the media remained well preserved. No spirochetes were demonstrated in microscopic sections of the aorta stained by Levaditi's method.

DISCUSSION

No attempt is made in this paper to review the literature nor to discuss in detail the clinical aspects of dissecting aneurysm. For this information excellent articles by Shennan[2], Klotz and Simpson[3], and Schnitker and Bayer[1] may be consulted.

Age—Of all the 141 cases of Schnitker and Bayer[1] 53 fell into the age group of 21 to 30 years. Our 24 year old patient is an addition to this group.

Previous Cardiovascular Disease—Factors given considerable emphasis in the past are hypertension of varying degree, arteriosclerosis, direct trauma, and developmental anomalies. In our case there was no previous history of hypertension, cardiac enlargement or arteriosclerosis as evidenced by the U. S. Army physical examination record of the preceding year.

Pathologic Findings—Shennan[2], Klotz and Simpson[3] and others state that the etiology underlying dissecting aneurysm of the aorta is a cystic type of degeneration of the media (Erdheim's medionecrosis cystica). The pathologic report stated that there was perivascular infiltration about occasional capillaries with congestion of the vascular spaces of the media and adventitia. The inner part of the media was well preserved. These findings were reported as exceedingly minimal.

Physical Exertion—With these minimal pathologic findings it seems to us that a definite relationship existed between the patient's physical exertion and the onset of the dissecting process. The West Virginia State Compensation Commissioner accepted the evidence presented and ruled that the case was one of accidental death.

Coincidental Syphilis—In the past, syphilis as an etiologic factor in the production of dissecting aneurysm has been minimized. This man's initial lesion occurred eight months previously and immediate treatment was administered. In the microscopic sections of the aorta stained by Levaditi's method no spirochetes were demonstrated. These findings would seem to rule out syphilis or a therapeutic paradox as a causative factor.

Heart Murmur—An interesting clinical finding was the occurrence of a loud diastolic murmur along the left sternal border in the presence of healthy aortic valves. This type of murmur has been described sufficiently often in the past to be helpful in diagnosis. Hamman[4] attributed the aortic insufficiency to imperfect closure of the aortic valves due to distortion of the aortic ring by the dissection. In the case presented there was dilatation of the root of the aorta with healthy valves. Here it would seem that the above explanation was correct.

CONCLUSIONS

1. A case of dissecting aneurysm in a 24 year old male is reported.

2. The relationship between physical exertion and the onset of the dissecting process was definite enough for the case to be acceptable under state compensation ruling.

3. The presence of syphilis was considered coincidental.

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4. The sudden appearance of an aortic diastolic murmur in an individual with precordial pain was considered to be of aid in the diagnosis of dissecting aneurysm of the aorta.

5. Death was due to hemopericardium with cardiac tamponade.

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SOME DUST DISEASES OF THE LUNG

Since Koch's discovery of the tubercle bacillus, tuberculosis has been the most closely studied of the diseases of the chest. It was not until about 1930, when improved technique began to have an effect, that radiological investigation became an essential part of the examination of the chest, and it was soon evident that many dusts caused abnormal shadows in X-ray films.

The same type of shadow may be caused by collections of inert material in the lymphatic spaces of the lung or by fibrosis in the lung itself. The essential thing to decide is the nature of the pathological process which gives rise to the shadows, the amount of disability that it causes, and the course which the condition is likely to pursue.

The next great advance may well follow a study of the contaminants of the air breathed into the lung. These contaminants include not only dusts but gases; in an industrial community there must be some exposure to acid gases such as nitrous fumes, chloride, and phosgene among others. And it is not only in an industrial community that grave disease of the lung may be caused by dust, for Fawcett has shown that farmers in Cumberland may develop fibrosis of the lung after handling mouldy hay, and this has also been reported recently from Switzerland and Sweden.—British Medical Journal.

NEED FOR MENTAL SCIENCE RESEARCH

Psychology, psychiatry, and psychoanalysis are disciplines pertinent in the solution of current problems. Aside from the statistical fact that 3 out of every 7 beds in the hospitals of the United States are occupied by the mentally ill—a vast drain in terms of lost manpower and cost—and that untold numbers of borderline cases permeate the entire social structure, we need to know more about the workings of the mind. For there is little doubt but that nonevident factors affect human behavior profoundly, factors like frustrations and fears.—E. V. Condon in Science.

PEDIATRIC X-RAY DIAGNOSIS

During the last decade pediatric roentgenology has expanded rapidly owing to several factors. Better roentgen images of infants and children are now more easily obtained with faster exposures which can be made with the newer roentgen machines; now there are actually no serious difficulties in the examination of very young—even uncooperative—children and newly born infants.

Pediatric roentgen examination has been greatly stimulated recently by the development of successful surgical treatment of several types of congenital heart disease. Notable contributions to roentgen diagnosis in this field have been made by Taussig of Baltimore in Cyanotic heart disease, by Neuhauser of Boston in the compressing congenital lesions of the aortic arch and its branches, and by Castellanos of Havana in opaque angiocardiography.

During the last three years, two new infantile disorders, infantile cortical hyperostosis and premature bowing of the long bones, have been identified for the first time, principally through the findings at roentgen examination. It is now clear that infantile cortical hyperastosis is by no means a rare disease, having been widely mis interpreted in the past as scurvy, syphilis, leukemia, hematogenous osteomyelitis, and skeletal neoplasm. Its cause is unknown.—Radiology.

CHILDLESSNESS HIGHEST IN CITIES

A considerable proportion of married women in our country remain childless throughout their lives. Currently, about one seventh of the women who had ever married leave their reproductive period without having had children.

The proportion of married women who are childless is higher in urban than in rural areas. Then, too, the proportion is higher for the women who have had at least a high school education than for those whose education was limited to grade school.

The proportion of childless married women is highest in urban places, somewhat lower in nonfarm rural areas, and lowest in farm areas. This general relationship holds for each level of education attainment and at virtually every age period. Thus at ages 20 to 24, the proportion of childlessness among the women of least education was 33.0 percent in urban areas, 26.3 percent in rural nonfarm, and 23.4 percent in farm areas; for women at these ages who had attended college, the respective percentages were 54.1, 49.1, and 53.4.

The figures just quoted also indicate that, at the younger ages, the variation in childlessness according to area of residence is materially greater for the college women than for those who had only a very limited education. At the older ages, on the other hand, the college group shows the least variation with area of residence.—Statistical Bulletin, Metropolitan Life Insurance Company.

TIC DOULOUREUX

The etiology of tic douloureux remains completely unknown. A variety of theories have been advanced but none of them is completely tenable.

Harris strongly advocates the theory of dental sepsis as the etiological agent but this theory hardly accounts for the occurrence of pain many years after patients are completely edentulous. Dandy felt that the sensory root was the seat of pathology in many cases, being impinged upon by tumors or aberrant vessels. The brain stem itself has been indicated because of the occurrence of tic pain in some patients with multiple sclerosis who at post mortem examination are found to have sclerotic plaques involving the sensory nuclei of the fifth nerve.

It seems most probable that the flashing pain of tic douloureux is a symptom that may be explosively manifested by factors affecting any part of the fifth nerve from its peripheral branches to its central connections.—C. C. Coleman, M. D., John M. Meredith, M. D., and C. E. Troland, M. D., in Va. Med. Monthly.

RHEUMATISM IN THE AGED

"In the morning it crawls on four legs; at noon it walks on two legs and in the evening it creeps on three." This old enigma from Greek mythology depicting the life cycle of man expresses well our idea that rheumatism and old age are inseparable and inevitably associated. The term "rheumatism" is used loosely and ordinarily refers to pain in the extremities or spine. By the same token "aged" is a vague term and it is probably as well to consider a man in that category when he refuses to change his religion, eating habits or his style of underwear.

Be that as it may, when a patient forty-five years of age or beyond presents himself in the physician's office and complains of pain in his arms, legs and spine, the chances are very good that he can be relieved of his pain. The first responsibility is that of diagnosis and if any advance has been made in the field of rheumatic disease, it is in our ability to analyze critically the physiological cause of the disorders which lead to rheumatic complaints.—Wm. K. Ishmael, M. D., in Geriatrics.

DIABETES DETECTION

To discover the asymptomatic cases of diabetes the American Diabetes Association recommends a two-fold policy: (1) a urine test for everyone every year and (2) a blood sugar test to follow every positive urine test.

To help the general practicing physician treat the diabetic, the American Diabetes Association has sponsored "The Handbook of Diabetes"—a pamphlet presenting simple and concise direct recommendations in regard to the diagnosis and treatment of diabetes. Through the ADA Forecast, a magazine for the public, published every two months, the Association offers the diabetic patient, his family, and all persons interested in diabetes, both information and inspiration. Communications and inquiries concerning the American Diabetes Association or the ADA Forecast may be addressed to the Executive Office, 1 Nevins Street, Brooklyn 17, New York.

TUBERCULOSIS ABSTRACTS*

TUBERCULOSIS IN THE OLDER AGE GROUP

The present practice of making extensive studies of tuberculosis in the younger age group of our population, thus minimizing the importance of the disease in the aged, has proved to be unwise.

The statement has been made that in persons over the age of 50 years the occurrence of communicable pulmonary tuberculosis is more frequent than in any other period. In 3,000 routine postmortem examinations made at the Philadelphia General Hospital from 1936 to 1937, 11.2 per cent of the 1,000 patients 60 years of age and over and died of tuberculosis. This and other evidence leaves little doubt that tuberculosis among older individuals is not rare.

The same irregular periods of activation and quiescence which are characteristic of tuberculosis occur in the older age group, and when continued, calcareous areas, fibrosis, fibrocaseous or fibrocavernous pathology finally develop. The disease among the elderly is usually of a chronic nature, and the patient continues with his occupation. One of the deficiencies in the control of tuberculosis is the failure to discover the disease in elderly individuals who may be spreaders of tuberculosis for many years.

A study of case histories of older patients having pulmonary tuberculosis gives the impression that the disease is usually acquired before 40 years of age though the time of onset is often difficult to determine.

Physical examination does not materially aid in making a diagnosis. Spinal deformities, ossification of the costal cartilages, and a decreased vital capacity are encountered in older patients. These alter the signs on inspection and palpation. Upon auscultation the findings are often confused by the presence of other pathologic conditions, namely, bronchitis, bronchiectasiss asthma, heart disease, and, particularly, emphysema. The X-ray film is the decisive factor in making a diagnosis in older as well as in younger persons. Neither a negative sputum examination nor a negative tuberculin test can rule out the disease.

These elderly patients present problems of segragation, individual education for their own and the public's safety, and their own personal treatment.

In the past 75 years persons over 50 years of age in the United States have increased from 3.8 to 5.7 per cent. The census of 1940 showed approximately 9,000,000 adults over 65 years of age. Should this increase in our old age population continue aged persons with tuberculosis must be given serious consideration to avoid the transmission of the disease from the aged to the young.

Tuberculosis in the Older Age Group, Charles D. Boyd, M. D., The Wisconsin Medical Journal, December, 1947.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Association.

The President's Page

I was very much interested in and impressed by the announcement by Dr. H. C. Byrd, President of the University of Maryland, that the members of the Board of Regents have made a detailed study of the needs of medicine in Maryland. As the result of this study, the Board has decided definitely to proceed with extensive improvements to the University hospital and school of medicine. Plans include further development of teaching hospitals in the rural areas.

And, then again, I have received a great deal of inspiration from an article by Chester G. Starr, Director of Rural Health of the Missouri Farm Bureau, in which he points out pertinently that general practice is not being encouraged in and out of school the way it should be. He quotes what others have said in journals he reads with reference to too much emphasis being placed on specialization. He believes that instructors in many medical schools often encourage young men to become specialists rather than take general practice for a career. He feels that if the situation were placed before the young graduates they would find lucrative and more enjoyable practice in the rural areas as general practitioners than they would by locating in the highly competitive overcrowded city field.

This situation is serious in our state, and much can be done to correct it. Of course we must get at the source of the problem; that is, early medical training. I am convinced that we in West Virginia can properly meet this problem and others like it by developing our own program of medical preparation. There should be more harmony between the premedical and the medical schools. Today a youngster preparing for medicine does so with the hope he may enter a medical school. Naturally, it is impossible to establish the practice of vocational guidance in the early semesters of premedical school when the advisor does not know what the student wishes to follow.

With the establishment of a new medical school in West Virginia, a four-year college developed along the more progressive ideas of education, I feel sure we can eliminate many of our current medical problems. Certainly the time is ripe for our medical profession to join with laymen in the development of a progressive medical program which will surely follow the establishment of a four-year medical school. If we do not take this initiative, our people and the people of other states may, in desperation, support a national health law that provides for compulsory health insurance. I feel sure that West Virginia can pull its public health program up by its own bootstraps.

I can only advocate a faith in the future, faith that measures will be taken to provide adequate medical care and hospiatl service for all of our people. The plight of the poor in this state is a terrible thing; we must not forget it. It is my opinion that we can meet this problem more effectively by taking steps now to develop, through a four-year school of medicine, many more finely trained physicians than is possible under our present arrangement.

Sydney Smith, who had a keen way of expressing himself, once wrote, "The fact is, that to do anything in this world worth doing, we must not stand back shivering and thinking of the cold and danger, but jump in and scramble through as well as we can."

Thomas Bee

President.

West Virginia Medical Journal

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WEST VIRGINIA

"Such is the patriot's boast, where'er we roam,
His first best country ever is at home."

—GOLDSMITH.

In that immortal valedictory, Aequanimitas, Osler says: "In the physician or surgeon no quality takes rank with imperturbability [which is an] essential bodily virtue." He describes Antonius Pius, on his death bed, summing up the entire philosophy of life in the single word, "aequanimitas". We have tried hard to cultivate this stalwart characteristic, but every now and then some episode shakes us so severely that our imperturbability flattens out. Usually anger is our stumbling block.

Recently our aequanimitas was sadly traumatized and our anger heightened to the boiling point by an article on West Virginia which appeared in the American Mercury. The author, Michael Kearns, of whom we had never heard before (which should be held against us, not him), is described as "raised and educated in West Virginia". We cannot help but wonder exactly where he was "raised and educated". Certainly, from his description, one would never recognize West Virginia. There is, of course, some truth in his article, but it is so lost in a maze of phantasy and folk-lore as to be largely unrecognizable.

Are all the sons of the Mountain State "of no importance"? Do Stonewall Jackson, John W. Davis and Newton D. Baker come within this category? Are Oliver Chitwood's histories "of no importance"? Was Waitman Barbe's marvelous teaching of English lost on the present generation of mature West Virginians? Where does the gentleman place Van Liere's recent original work on anoxia?

We have heard that Mr. Kearns presents as a defense the statement that in being edited his manuscript was changed so much that he scarcely recognized his own brain child when it appeared in print. Possibly so. In the same issue the author of the article on Pennsylvania bemoans the treatment his story received at editorial hands. Perhaps we might consider also the natural causticity inherent, in our opinion, in the pages of the American Mercury.

Here's to West Virginia! We love our Mountain State! We love her majestic hills, her mountain crags, her rhododendrons, her rugged rocks, her purling rills, and her rushing rivers! Goodbye, Mister Kearns!

1949 MEETING

It is good news to the hundreds of members of the State Medical Association that the Council has selected The Greenbrier, at White Sulphur Springs, as the place for the annual meeting in 1949. Charged with this responsibility as the result of action by the House of Delegates at the final session of the 1948 meeting in Huntington, the Council made a thorough investigation of convention facilities offered or available in every part of the state before reaching a decision. Everything considered, we feel that the choice of The Greenbrier will do much to stimulate continued interest in annual meetings of the Association.

Hotel space has been quite a problem for the past few years, and the point was reached where but two cities in the state could in any way offer satisfactory accommodations. Consequently, meetings have alternated between Charleston and Huntington. The Kanawha and Cabell Medical Societies have most generously volunteered as hosts. Certainly it is now proper and advisable that the meeting be moved to some other part of the state, especially as The Greenbrier is once more available for convention purposes.

The State Medical Association has grown into an organization with nearly 1400 members. Attend-

ance at annual meetings has increased to the point where it is difficult to find rooms for everybody. It is apparent that sufficient rooms will be available for the meeting next August at The Greenbrier, especially if members take advantage of rooms available at other hotels at White Sulphur Springs and Lewisburg.

Those who have attended conventions at The Greenbrier in the past have been anticipating the reopening of this famous resort hotel ever since the close of World War II. This anticipation will become a realization in August, 1949.

HOME TALENT

The current president of the Medical Society of the District of Columbia, Dr. John Minor, worthy son of a distinguished sire, strikes a responsive chord in our own soul in his initial "President's Page". In discussing the use of imported speakers for medical societies and the impropriety of overdoing it, Doctor Minor proposes to develop Washington's home medical talent. He says:

> "To those who say that we have had the opportunity to listen to authorities in their fields, I would answer, it is better to have an indifferent paper offered by one of our own members and to have open free discussion in even a small group, than to have the vicarious satisfaction of listening to some authority from distant parts whose work may actually be no better than work being done in our midst, in similar fields, and of whose paper there can be no true discussion. * * *
>
> "It is earnestly hoped that everyone in the Society will feel free to offer papers, and above all, feel free to discuss them in open meeting — a method of thought stimulation for which there is no substitute."

In West Virginia we have in recent years leaned over backward toward using imported speakers. Such a course of action tends to retard the development of our own local men. One of the chief functions of the county society is to develop not only good medical practice among its membership, but ability to speak and present thought clearly and in orderly sequence.

We would not decry the use of imported speakers when done in proper volume. Such practice is stimulating and challenging to do better work, but used in veterinary doses, has the opposite effect and depresses initiative and originality among our own members who must furnish professional care for the home populace. We would make bold to suggest that home talent should present at least two-thirds of the programs for our county societies. We are doing good medicine in West Virginia, especially in the larger centers; why hide our light under a bushel?

MEDICAL EDUCATION

We have never believed that our medical education in America is perfect, but we have been proud of its accomplishments, and we believe justly so, for better physicians are being graduated today than ever before. However, we have recently noted two verbal brickbats hurled at the medical schools. In his Foreword to Coope's Diseases of the Chest, just off the press, Lord Horder (who may be referring to British medical schools only) says that "the present generation of physicians [should] lift the teaching of Medicine out of the academic rut into which it has fallen. . . . During the preclinical stages of the curriculum, professors, each one staking out bigger and bigger claims in his particular field, have drugged their pupils' minds with maximum doses of more or less abstract science, largely obscuring the main purpose of their great adventure". And now the Subcommittee on Undergraduate Education of the American Academy of Allergy approaches the editors of the state medical journals with this statement: "It is our feeling that the education of our medical students in allergy is being woefully neglected". Moreover, very recently the College of Chest Physicians has urged that the undergraduate training give more attention to diseases of the chest.

From the standpoint of the man on the firing line of medicine who is only an observer of medical education, and not a participant therein, the curriculum has been stretched almost to the breaking point. Certainly the preclinical subjects should be taught well and intensively but they should be integrated, as far as possible, with and into clinical medicine. In the clinical branches, of course fundamentals and basic principles are a sine qua non, but efforts to graduate doctors who are specialists in every branch should be avoided.

It is possible that instruction during the clinical years could be arranged to include a moderate number of electives in which more detailed and intensive training could be undertaken. What we need in America now, however, is a plentiful supply of good general practitioners and a smaller proportion of specialists. Moreover, medical education is a continuous and a continuing process and must be going on all the time throughout the active life of a successful physician, for to be successful in the profession and give the patient such service as he is entitled to, the practicing physician must study continuously and adjust his education and professional practices to the ever changing gamut of scientific medical knowledge.

SUPPORT FOR MEDICAL SCHOOL

If any doubt existed in the mind of any West Virginian that our people are not aroused to the needs for a four-year school of medicine in this state, it was dispelled August 14, when the platform of each major political party declared unequivocally for the construction of such a school.

The committees which framed the platforms undoubtedly took cognizance of the doctor shortage in West Virginia, as well as the increasing difficulty experienced by the youth of this state in enrolling in medical and dental schools in other states. This is one of our most pressing problems. Both parties propose to do something about it.

Too long have we tolerated the existence of a school that provides but half an education for West Virginia boys and girls who really desire to study medicine. Too long have we closed our eyes to the need for a grade A four-year school. Too long have we just done nothing about the antiquated medical school quarters at West Virginia University. It is ridiculous to think that a state as big and as wealthy and as progressive as West Virginia cannot support a four-year school of medicine.

The major political parties have spoken out fearlessly in favor of a project that is backed solidly by the Council which represents nearly fourteen hundred members of the West Virginia State Medical Association. We sincerely hope that prompt action looking toward the actual construction of the four-year school will be taken by the legislature when it convenes in regular session next January.

OLD FRIENDS AT THE GREENBRIER

Each week for the past two months, one or more groups of business and professional people from over the country have held their annual meetings at The Greenbrier, in White Sulphur Springs. Repurchased by the Chesapeake & Ohio Railway from the government after Ashford General Hospital was closed, the hotel and grounds were rehabilitated at a cost of over three million dollars. The hotel proper was redecorated top to bottom under the supervision of Dorothy Draper. No one could possibly hope to describe the beauty of the place. It must be seen to be appreciated.

Recently the West Virginia Banker's Association met in annual session there and the members are loud in their praise of the treatment accorded them. Over 400 attended the annual banquet.

All of the members of the State Medical Association who have attended conventions there in the past will be delighted to know that George O'Brien is back at his old post as assistant manager. He is acquainted with hundreds of doctors in the state, and the Association has been assured by him that no stone will be left unturned to make the 1949 meeting a success. He has personally stated that the management will provide accommodations at The Greenbrier itself for nearly 500 members and their wives.

No doubt hundreds of members, hungry for a sight of the new Greenbrier, will plan their next summer's vacation to fit in with the annual meeting in White Sulphur Springs, scheduled for early August.

PSYCHIATRIC SEMINAR

The program for the Psychiatric Seminar in Huntington October 6-7, which is being sponsored by the bureau of mental health of the state health department and the State Medical Association's committee on mental hygience, is printed elsewhere in this issue of The Journal.

Every effort is being made by the bureau and this key committee to make the seminar worth while. Its success will depend upon the interest of the members of the profession and upon the practicable value of the subjects arranged for discussion.

The program is being arranged by Dr. William B. Rossman, director of the bureau of mental hygiene of the state health department, and Dr. O. B. Biern, of Huntington, chairman of the mental hygiene committee. It is hoped that interested doctors will cooperate by submitting any suggestions they may have to offer concerning the subjects to be discussed at this important seminar.

WITHOUT EXHIBITS

For the first time in many, many years the West Virginia State Medical Association will meet in annual session without scientific and technical exhibits. The arrangement of exhibits at the last two conventions, when they had to be separated from the place where general sessions were held, was anything but satisfactory. There is no promise that these conditions will improve by next year.

Both doctors and exhibitors regret that there can be no exhibits in 1949. It is sincerely hoped that conditions will improve to such an extent that all activities of the State Medical Association, including the usual high class scientific and technical exhibits, may be under one roof at the convention in 1950.

HAIR AND ENDOCRINES

The Smith Brothers of cough drop fame, with heavy heads of hair as well as whiskers, and the shampoo advertisements with Gretchens of long braids who could sit on their hair were characteristic of the appearance of adults of two or perhaps three generations ago. These hair patterns have become increasingly rare in this century.

Women today have shorter, thinner hair, regardless of whether the beauty parlor trims it; and the number of men under thirty with thin hair or a nearly bald pate is increasing. A young man with a thick shock of hair on top of his head is now the exception rather than the rule. Greyness in both sexes is also more common at an early age.

Hair in general would seem to be growing thinner and shorter, perhaps of less tensile strength. Hair appearance of experimental animals has a definite relation to the general health and nutrition. Among human beings hair appearance has deteriorated during a period when the general health of the population has certainly improved and longevity has increased.

Early thinning of hair on top of the head and early greying in humans has increased during a period when use of refined foods, white flour, sugar, and also fat soluble vitamins was increasing. Consumption of cod-liver oil and related products has increased more or less as white flour and sugar use has increased in this century. Increase of consumption of the B group of water soluble vitamins is a phenomenon of much more recent date.

Whether these dietary habits bear any relationship to the present day human hair coat eventually will be learned, as well as the incidence of healthy hair among patients with the so-called degenerative diseases.

It is interesting to note that hair growth is considered a useful subject of study in a psychiatric clinic.—Southern Medical Journal.

THE HIPPOCRATIC OATH

The Hippocratic Oath was not a legal enactment. It carried no punitive measures. It drew its strength from moral sanction. It was an oath, no more and no less. And yet this oath has stood forth as a monument to the greatness of a people and to the noble ideals of a profession throughout all the ages since first it was intoned. Wherever the genius of the Greek found refuge, there practitioners of the healing arts took the oath to heart, in spirit and in form.

The oath contains the essential ethical precepts of the practice of medicine. In the judgment of many scholars, no later code has ever improved upon the oath. Some have protested that as the laws governing the practice of medicine have multiplied, and as the articles of the professional codes of conduct and of ethics have increased, the spirit that was embodied and expressed in the oath has become obscured and dissipated. Laws are at best prohibitive injunctions. They are without the exhortation, without the inspiration of the oath.—Iago Galdston, M. D., in New York Medicine.

General News

BOTH PARTIES, AMERICAN LEGION, DECLARE FOR FOUR-YEAR SCHOOL

The movement for a four-year school of medicine in West Virginia was given added impetus on August 14, when both major political parties adopted platforms with strong planks advocating the construction of such a school, which would supplant the present antiquated structure at Morgantown.

In addition, strong public health planks were adopted by each party. If the recommendations are favorably considered by the legislature, they will undoubtedly result in the complete reorganization of our state department of health. This is also a step recommended by the State Medical Association.

AMERICAN LEGION BACKS FOUR-YEAR MEDICAL SCHOOL

The American Legion, Department of West Virginia, in annual convention at Huntington, August 16, unanimously adopted a resolution approving the establishment of an accredited school of medicine in West Virginia, and asking that a bill to carry out the recommendations be introduced at the next regular session of the legislature in January 1949. A similar resolution was unanimously adopted by the American Legion Auxiliary.

The planks in the two party platforms which concern a four-year school of medicine and improved public health services are as follows:

Democratic Platform

"We favor such legislation and appropriation as will eventually lead to a four-year medical school in our state. This program, endorsed by the medical profession and so needed by the people of our state, is worthy of the support of all our citizens.

"State government must be concerned with the health of its people. A healthy people means a happy people. It shall be our aim to inaugurate a more comprehensive program of this nature, and in doing so we shall seek the aid and advice of the medical profession with particular emphasis upon bringing increased health facilities to the rural sections of the state.

"The great and crying need for well trained doctors, nurses, and health workers in the less populated areas of our state is a condition which must be remedied. Again, the need for a four-year medical school for our state presents itself.

"We pledge our party to a continuance of the health services already in existence, with particular reference to cancer control, venereal disease control, tuberculosis control and the program to fight infantile paralysis. Their expansion is necessary and vital as well as that in other specific fields of health."

Republican Platform

"The Republican party is opposed to any form of compulsory health insurance and to any legislation which would socialize or regiment the practice of medicine. We endorse any non-profit plan which gives aid to the needy in the form of medical care and hospital service.

"We advocate the removal of politics from all health and welfare agencies; reduction and elimination of

duplication of the administrative costs in the care of the indigent; allotment of specific responsibilities to agencies charged with the distribution of medical and hospital care; and guaranteed security for public health officers and personnel.

"Realizing that there is an insufficient number of medical doctors and dentists in the state of West Virginia, and the difficulty of medical and dental students from this state to gain entrance to medical and dental colleges, we advocate and favor the establishment of a four-year medical and dental college in this state."

Key Committees at Work

Key committees of the West Virginia State Medical Association have been hard at work on these problems since they were given the full endorsement of the Council.

It is probable that the whole legislative program will be in shape for final presentation to the Council by the end of this month, and the program that is approved will be immediately submitted to the twenty-nine component societies for consideration.

The legislature convenes in regular session January 12, 1949 It is expected that the necessary bills will have been drafted and be ready for introduction on the opening day.

COUNCIL SELECTS THE GREENBRIER FOR 82ND ANNUAL MEETING IN 1949

The 82nd annual meeting of the West Virginia State Medical Association will be held at The Greenbrier, world famous resort at White Sulphur Springs, August 4-6, 1949. Option on this date, which has been held by the Association for several weeks, was exercised by the Council late in July.

Two cities, Charleston and White Sulphur Springs, were considered as the place for the 1949 meeting. A decision was postponed repeatedly on account of the uncertainty concerning the availability of space for scientific and technical exhibits. There was no assurance that exhibits could be arranged in Charleston, even outside the hotel headquarters, and no space whatsoever is available at The Greenbrier. Consequently, there can be neither scientific nor technical exhibits at the meeting.

For the past two years it has been necessary to set up exhibits outside the hotel where general sessions have been held. This arrangement has not been satisfactory either to members or to exhibitors, and a great deal of dissatisfaction was apparent at the last two meetings on account of this arrangement.

"The Greenbrier," White Sulphur Springs

It was thought that a new auditorium would be available at White Sulphur Springs for 1949, but it is now learned that the building will not be constructed at the present time.

First Meeting at the Greenbrier Since 1940

The Council's vote to hold the meeting at White Sulphur means that the State Medical Association will return to this popular state resort for the first time since 1940. Previously the Association had held its meetings there in 1938 and 1939. The Virginia Medical Society met there jointly with the West Virginia State Medical Association in 1940.

Assurances has been received from the management at The Greenbrier that every effort will be made to take care of all members and their wives who may attend the meeting. It is now known that accomodations can be provided for between 450 and 500 people.

The last time the convention was at White Sulphur there was a doctor registration of 338. This compares with 551 at Charleston in 1947, and 496 at Huntington in 1948.

Auxiliary to Meet

The Auxiliary will hold its 25th annual meeting at the same time, and, in order to make sure that there will be no serious housing shortage, arrangements have been made for an additional forty-five rooms at local hotels in White Sulphur Springs to take care of nearly a hundred persons. An informal canvass of tourist homes and hotels in Lewisburg shows that many additional persons can find accomodations in that nearby city.

Reservations

Reservations cannot be accepted at The Greenbrier until May 1, 1949, but other hotels in White Sulphur Springs are now booking reservations for the convention next year.

Program Committee Begins Work

The scientific work (program) committee will hold its first meeting this month. Dr. Paul H. Revercomb, of Charleston, is chairman, and the other members are Dr. J. Frank Barker, of Huntington, and Dr. Carl E. Johnson, of Morgantown.

POLIO IN WEST VIRGINIA

There is no indication of an epidemic of poliomyelitis in West Virginia during the present year notwithstanding the fact that the disease is epidemic in other states.

For the period from January 1 through August 7, 1948, 38 cases of polio had been reported to the state health department, as against fourteen cases for the same period in 1947. According to Dr. N. H. Dyer, state health commissioner, the last epidemic occurred in 1944, with 222 cases and 25 deaths being reported. There was also an epidemic in 1940, with 662 cases and 60 deaths being reported to the state health department.

Of the total number of cases in 1948, nine were reported during the last week in July, and sixteen the first week in August.

SCHOLARS IN MEDICAL SCIENCE

Medical schools in the United States and Canada are being invited by the John and Mary R. Markle Foundation to make nominations for the second group of Scholars in Medical Science on or before December 1, 1948. Each school, through the dean, may nominate one candidate. No nominations from individuals will be considered. Dr. E. J. Van Liere, dean of the School of Medicine of West Virginia, has already been invited to submit a nomination.

RELOCATIONS

Dr. Charles G. Polan, of Huntington, who has been associated with the Veterans Administration in that city, has opened offices at 422 Tenth Street, Huntington Federal Savings and Loan Building, with practice limited to his specialty of psychiatry and neurology.

* * * *

Dr. Terrell Coffield, formerly located at the Ohio Valley General Hospital, Wheeling, has moved to New Martinsville, where he will continue in general practice, with offices on Main Street.

* * * *

Dr. James T. Spencer, of Charleston, has completed his work at Jefferson Hospital, Philadelphia, in ear, nose, and throat, and peroral endoscopy, and has opened offices at 1112 Virginia Street East, where he will engage in the practice of his specialty.

* * * *

Dr. J. Keith Pickens, formerly of Charleston, has opened offices at 116 South Fifth Street in Clarksburg, where he will continue in practice.

* * * *

Dr. W. V. Wilkerson, who has practiced at Prenter for several years, has moved to Highcoal, where he will continue in industrial practice.

* * * *

Dr. Richard N. O'Dell was through error reported in the August issue of the Journal as having opened offices at 2635 Third Avenue, Nitro. Doctor O'Dell, who has just recently completed a year's postgraduate work in internal medicine at the University Hospital, Syracuse, New York, has located in Charleston, with offices at 1120½ Quarrier Street, where he will practice his specialty.

* * * *

Dr. C. E. Hamner, former superintendent of Spencer State Hospital, has moved to Columbus, Ohio, where he has accepted appointment as a member of the staff of Columbus State Hospital.

* * * *

Dr. Louis Y. Peskoe, of Winona, has accepted appointment as chief of Medical Service at the Veterans Administration Hospital in Augusta, Georgia. He has recently been serving as a member of the staff at Nichols General Hospital (VA) in Louisville, Kentucky.

Dr. Edward Pendleton, honorary lifetime member of the West Virginia State Medical Association, has moved from Clarksburg to Huntington, where he is living at 2042 Fifth Avenue.

W. VA. ACAD. OPH. AND OTOL. TO MEET AT THE GREENBRIER, SEPTEMBER 20-21

The fall meeting of the West Virginia Academy of Ophthalmology and Otolaryngology will be held at The Greenbrier, White Sulphur Springs, September 20-21. The following program will be presented:

"Endaural Surgery in the Modified Radical and Radical Mastoidectomies," and "Osteomas of the Frontal Sinuses"—James A. Moore, M.D., Chief of Otolaryngology, The New York Hospital, New York City.

"The Management of Strabismus," and "The Use of Base—In For School Myopia"—Oscar B. Nugent, M.D., Chicago.

"Histamine Diphosphate Used Topically in the Eye —Additional Data"—Edwin M. Shepherd, M.D., Charleston.

"Nasopharyngitis"—Keith E. Gerchow, M.D., Morgantown.

"Lye Burns in the Esophagus"—W. F. Shirkey, M.D., Charleston.

Dr. M. A. Gilmore, of Parkersburg, will also appear on the program, but the title of his address is not available at press time.

Officers for 1948-1949 will be elected at a business meeting which will be held in connection with the fall sessions.

The late Dr. J. Hallack Moore, of Huntington, was elected president of the Academy at the meeting held in Charleston, in 1947. Since his death Dr. E. C. Hartman, of Parkersburg, who is the president elect, has been serving as president. Dr. K. E. Gerchow, of Morgantown is second vice president of the Academy, Dr. S. S. Hall, of Clarksburg, secretary, and Dr. F. C. Reel, of Charleston, treasurer.

"MYSTERY" MALADY IN TUCKER IDENTIFIED

A recent outbreak of a respiratory disease in Tucker County is considered to have been tracheobronchitis, according to a semi-final report submitted to the state department of health by the USPHS.

A total of 27 cases of the disease was reported from the area, the first occuring in February, 1948, followed by one in March, two in April, 22 in May, and one in June. Four deaths resulted from this outbreak. Of the total number of cases reported, only eight have occurred since the investigation was initiated on May 21. No cases have been reported since June.

The disease, which has been sporadic, has affected only infants and children, the youngest being three weeks of age and the oldest a child eight years of age. The four deaths occurred in infants under two years of age.

According to Dr. N. H. Dyer, state health commissioner, a similar type of disease has been found during the past year in Mineral County, West Virginia, and in Cumberland, Maryland.

FUNDS FOR MENTAL HEALTH ACTIVITIES

The sum of $48,300 has been allocated for mental health activities in West Virginia for the fiscal year 1949 under the provisions of the National Mental Health Act.

W. VA. TB AND HEALTH ASSOCIATION SCHEDULES MEETING IN HUNTINGTON

The 28th Annual Meeting of the West Virginia Tuberculosis and Health Association will be held Wednesday and Thursday, September 15-16, 1948, at the Hotel Frederick, in Huntington.

The registration desk will be open on the mezzanine Wednesday from 9 A. M. until 7 P. M. Luncheon and dinner reservations should be made by members at the time they register.

The following program has been arranged for the two-day meeting:

Wednesday Morning, September 15

10:00—Meeting of Full-time Executive Secretaries, Sun Room, E. P. Wells, presiding.
Meeting of Volunteer Secretaries and Workers, Ballroom, James G. Stone, presiding.

Wednesday Afternoon

12:15—Annual Business Luncheon, Fireside Room, Dr. W. P. Bittinger, presiding.
Invocation—Rev. S. Roger Tyler
Opening Remarks by the President
Committee Reports
Election of Directors

2:00—General Session, Ballroom, Dr. J. J. Brandabur, presiding.
"Medical Social Work and Tuberculosis"—Mr. Albert E. Rhudy, Medical Social Worker, Pinecrest Sanatarium.
"Tuberculosis and Social Work"—Mr. Leonard Gordon, Chief of Social Services, West Virginia Department of Public Assistance.
"Trends in Tuberculosis"—Miss Mary Dempsey, Statistician, National Tuberculosis Association.

Wednesday Evening

5:30—Reception for Delegates and Guests, Mezzanine. Hosts: Officers and Directors, Huntington Tuberculosis Association.

7:00—Annual Banquet, Fireside Room, Dr. W. P. Bittinger, presiding.
Invocation—Rev. John A. Park
Introduction of Officers and Guests
Address: Mr. James G. Stone, Director, Program Development, National Tuberculosis Association.

Thursday Morning, September 16

8:00—Physicians' Breakfast, Crystal Room, Dr. Cole D. Genge, presiding.
X-ray Symposium

10:00—Meeting of Board of Directors, Rose Room
General Session, Ballroom, Dr. C. A. Hoffman, presiding.
"How Tuberculosis Associations Can Help Health Departments"—Miss Esther M. Finley, Director Public Health Nursing, Kanawha-Charleston Health Department.
"Planning and Management of Tuberculosis Diagnostic Clinics"—Dr. C. L. A. Wehr, Acting Director, Bureau of Tuberculosis Control, State Health Department.
"Planning a Tuberculosis Association Program" —Mr. John A. Louis, Executive Secretary, Ohio Tuberculosis and Health Association.
"Future Plans of the State Health Department" —Dr. N. H. Dyer, State Health Commissioner.

Thursday Afternoon

12:15—Luncheon, Fireside Room, Dr. W. P. Bittinger, presiding.
Invocation, Rabbi Eugene Hibshman
Introduction of Guests
Introduction of Incoming President

1:30—Christmas Seal Forum, Rose Room, Edmund P. Wells, presiding.

Dr. W. P. Bittinger, of Summerlee, is president of the West Virginia Tuberculosis and Health Association, W. L. Cooke, of Charleston, vice president, Mr. Robert C. Hawkins of Charleston, treasurer, and J. L. Patterson, of Logan, secretary. Mr. E. P. Wells is Executive Secretary of the Association.

The executive committee is composed of the officers and Drs. George F. Evans, Clarksburg; Leo H. Mynes, Charleston; G. R. Maxwell, Morgantown; Mr. W. A. Smith, Parkersburg; Miss May M. Maloney, Charleston.

An invitation to attend all sessions has been extended by the Association to all doctors and laymen active or interested in the fight against tuberculosis.

TRI-COUNTY HEALTH UNIT

A tri-county health unit, comprising Morgan, Berkeley and Jefferson counties, has been organized in the eastern panhandle. This new unit takes over the services of the part-time health unit and nursing services in Morgan and Jefferson counties. An effort has been made for several years to merge the health units in the three counties, and with the combined unit now a reality, it will be possible to improve and extend health services in the three counties.

Additional clinical services have already been arranged and direct individual service will be provided where needed.

A budget of $57,000 has been fixed by the officials of the three counties. Part of this amount will be provided by the state health department with the aid of federal funds.

Dr. G. P. Morison, of Charles Town, who with the aid of other members of the medical profession, has been largely responsible for effecting the merger of health services in the three counties, will serve as health director for the new unit. He has been serving as part-time health officer for both Berkeley and Jefferson counties.

DR. THEODORE KLUMPP HONORED

Dr. Theordore G. Klumpp, president of Winthrop-Stearns, Inc., well-known to many members of the West Virginia State Medical Association, was elected president of the American Pharmaceutical Association at the recent annual meeting in Havana, Cuba. Doctor Klumpp is also chairman of the board of governors of the National Vitamin Foundation.

CEREBRAL PALSY FILM AVAILABLE

The film, "The Rehabilitation of a Cerebral Palsied Child," is available for use by professional and lay organizations in West Virginia. There is no charge for the use of this silent film, but transportation charges are to be paid by the organizations to which it is shipped. Inquiries concerning dates for the use of the film should be addressed to Steering Committee, Cerebral Palsy Clinic, Kanawha County Society of Crippled Children and Adults, Professional Building, Charleston.

OVER 200 TRI-STATE SURGEONS TO ATTEND HUNTINGTON MEETING

Preparations have been completed for the annual meeting of the West Virginia Section of the Southeastern Surgical Congress, scheduled for the Hotel Prichard, at Huntington, September 3-4. Between two and three hundred doctors from West Virginia, Kentucky, and Ohio are expected to attend the sessions.

Dr. R. J. Wilkinson, of Huntington, is chairman of the state executive committee, and will be in charge of the meeting. There has been no change in the program which was printed in the August issue of the West Virginia Medical Journal. The first session will get under way Friday morning, September 3, at 9:30 o'clock, with an address by Dr. Gilbert F. Douglas, of Birmingham, Alabama, president of the Southeastern Surgical Congress. His subject will be, "Sterility as Related to Benign Lesions of the Uterus and Ovary."

Dr. Lucien A. LeDoux, president of the Southern Medical Association, has accepted an invitation to speak before the annual luncheon at the Hotel Prichard, Friday at 12:30 P. M.

Dr. Herbert Acuff, of Knoxville, Tennessee, past president of the Southern Surgical Congress, and president elect of the International College of Surgeons, will be the principal banquet speaker at seven o'clock Friday evening. His subject will be "The Peptic Ulcer Problem." Dr. James S. Klumpp, of Huntington, will be toastmaster at the banquet.

The Saturday morning session will begin at 9:00 o'clock with an address by Dr. B. T. Beasley, of Atlanta, Georgia, who will discuss "Carcinoma of the Uterus." The session will end that morning with an address by Dr. M. L. White, of Charlottesville, Virginia, on "Postoperative Pulmonary Complications."

An executive session of the members of the West Virginia section will be held Friday afternoon, at four o'clock, at which time officers for 1949 will be elected.

PHC LICENSES 47 DOCTORS

As the result of the examination conducted by the Public Health Council in Charleston, July 5-7, 1948, forty-seven doctors have been licensed to practice in this state, thirty by direct examination, and seventeen by reciprocity with other states.

The following doctors were licensed by direct examination:

Earle McKenzie Bane, Elbert; Robert Ludington Brown, Charleston; Arthur Allen Carr, War; Robert Jean Carson, Eunice; Jess Paul Champion, Pineville; Erwin Rudolph Chillag, Holden; Elmond LeMoyne Coffield, Wheeling; Wyson Curry, Jr., Montgomery.

Leon Diamond, Red Jacket; Charles Shirey Flynn, Bluefield; Alfred Martin Francis, Coalwood; John Hercles Gile, Charleston; Ray Silvio Greco, Wheeling; David Alonzo Haught, Huntington; William Sawyers Herold, Summersville; Guy Eugene Irvin, Welch; Shelby Edward Jarrell, Packsville.

Clarence Archie Logue, Newell; James Richmond Low, Princeton; Michael John McAndrew, Jr., Chicago, Ill.; Maurice Joseph Murphy, Welch; James William Peck, Summersville; William Allan Phillips, Wheeling;

Robert Martin Poske, Parkersburg; Jay Emmett Rogers, Jr., Charleston; James Muncy Scott, Madison.

Roy Sherman Temeles, Pittsburgh, Pa.; Enoch W. White, Jr., Jane Lew; Leah Mildred Williams, Hinton; William Tilden Williams, Beckley.

The following is the list of doctors licensed by reciprocity:

Joel Allen, Charleston; William Branch Bishop, Elbert; Kendall Robert Burns, Coal Mountain; William Arthur Cover, Elkton, Va.; Howard Ross Crews, Huntington; William Steven Dick, Parkersburg; James Henry Feaster, Jr., South Charleston; Arthur Martin Gray, Gary; Waldo Cornell Henson, Jr., Charleston.

William Ward Kersey, Jr., Bluefield; Warren Dick Leslie, Wheeling; Ralph Hiram Nestmann, Indianapolis, Ind.; Robert Julian Nottingham, Morgantown; Roger Frederick Smith, Gallagher; Harold Eugene Snedden, Morgantown; James Thomas Spencer, Jr , Charleston; Chirstopher Carl Tully, Charleston.

The fall meeting of the Public Health Council will be held at the Daniel Boone Hotel in Charleston, October 4-6, for the purpose of examining applicants for licensure in West Virginia.

SMA SESSIONS AT DINNER KEY

The executive committee of the Southern Medical Association has selected Dinner Key, the former Pan American Air Depot, at Miami, as general headquarters for the annual meeting which will be held in that city October 25-28. Dinner Key is ten minutes' ride from the downtown hotel section, and all activities, including section meetings, registration, scientific and technical exhibits and motion pictures will be held in this one location. Parking space for over a thousand automobiles is available in the area around the main building.

The evening programs, which will include the general public session, the general session and the president's ball, will be held at the municipal auditorium, just off Biscayne Boulevard, and but a short distance from the headquarters hotel.

There will be twenty-one section meetings, two general sessions (one conjointly with the Southern Chapter of Chest Physicians) and the "Miami Day" general clinical sessions.

Hotel reservations will be handled by the hotel committee, Southern Medical Association, of the city of Miami Convention Bureau, 320 N. E. Fifth Street, Miami. Requests for rooms should be made immediately by letter or wire addressed to this committee.

COMMITTEES ACTIVE

Sub-committees of the fact finding and planning and legislative committees of the West Virginia State Medical Association have been meeting through August for the purpose of considering and completing a legislative program for 1949. It is probable that the program will be ready for consideration by the Council by the middle of September.

MEDICAL AND SURGICAL RELIEF COMMITTEE REACTIVATED IN STATE

The Medical and Surgical Relief Committee, which collected medical and surgical equipment and drugs for distribution to doctors in other countries following World War II, has been reactivated and is again endeavoring to collect equipment and drugs for physicians in foreign countries who are still handicapped in their practice by the lack of many items which are considered an every day necessity in medical practice in this country.

The West Virginia committee, of which Dr. William M. Sheppe, of Wheeling, is the chairman, is soliciting contributions of all kinds from doctors and hospitals in this state. Contributions may be in the form of a cash gift, or a gift in kind, including medical, surgical, and dental supplies, equipment, and instruments, pharmaceutical samples, recent technical books and periodicals. There is great need for the following:

Adhesive tape, ampoules (all types), anesthetics (local, general), antiseptics, aspirin, aspirin combinations, autoclaves;

Baby foods (cereals, clothes, nipples), cod liver oil, cotton gauze (all forms), dietary supplements, germicides;

Hospital ware, hot water bottles and syringes, hypo needles and syringes, liver and iron capsules, microscopes;

Penicillin (crystal, ointment, tablets), quinine (tablets, capsules), recent medical, surgical and dental books and journals, rubber sheeting and tubing;

Santonin and combinations, scientific apparatus, sedatives, standard medications for various conditions, sterilizers, streptomycin;

Sulfas (tablets and liquids), surgeons gloves, surgeons needles, surgical instruments, thermometers (fever, F. or C.), and vitamins (all types and strengths).

Gifts in cash should be mailed to James G. Blaine, treasurer, Medical and Surgical Relief Committee, Inc., 420 Lexington Avenue, New York 17, New York.

Information concerning the contribution of supplies of any type for the needy and sick in European and other countries may be obtained by writing to Dr. William M. Sheppe, Wheeling Clinic, Wheeling, W. Va.

DISTRICT HEALTH CONFERENCES

The annual Northern District Health Conference sponsored by the state department of health will be held October 8 at the Fairmont Hotel, in Fairmont. The Southern District Conference is scheduled for a week later, October 15, at the West Virginian Hotel, in Bluefield.

The two one-day meetings will be open to the public. More than 75 county and district health officers, health nurses, sanitary engineers, and sanitarians will attend the sessions.

MCV RECEIVES GRANTS

The Medical College of Virginia has recently received $43,000 in gifts, the largest of which came from the Commonwealth Fund to promote the College Regional Hospital Program. The American Tobacco Company, according to Dr. W. T. Sanger, the president, has also made a grant to the College of $15,000 for research purposes.

PSYCHIATRIC SEMINAR SCHEDULED FOR HUNTINGTON EARLY IN OCTOBER

A psychiatric seminar, sponsored by the bureau of mental hygiene of the state health department and the mental hygiene committee of the West Virginia State Medical Association, will be held at the St. Mary's Nurses' Home, in Huntington, October 6-7.

Emotional aspects of the various mental diseases will be stressed at this two-day meeting, and speakers for the most part will be men whose work is mainly nonpsychiatric. Several clinics on the common neurological problems are being arranged so that the seminar will have a broad overall character.

Members of the West Virginia State Medical Association will be asked to indicate their intention to participate so that it may be known definitely by the end of the month how many doctors will attend the luncheon and dinner.

The following is the tentative program arranged for the Seminar:

Wednesday Morning, October 6

9:30-10:00—General Introductory Remarks and Addresses of Welcome—N. H. Dyer, M. D., State Health Commissioner, Charleston, and Joseph L. Knapp, M. D., Superintendent, Weston State Hospital, Weston.

10:00-10:45—"The Mental Hygiene Program: What It Is and What It Means to West Virginia"—Robert H. Felix, M. D., Director, Mental Hygiene Division, USPHS, Washington.

10:45-11:30—"The Internist Discusses His Psychiatric Patients"—Oscar Biern, M. D., Huntington, Chairman, Mental Hygiene Committee, West Virginia State Medical Association.

11:30-12:15—"Common Neurological Problems and Their Handling"—(Speaker to be announced).

Wednesday Afternoon

12:15- 1:30—Round Table luncheon. Subject: "The Use of Community Resources in the Handling of the Psychiatric Office Patient"—T. S. Hill, M. D., University of Tennessee College of Medicine, Memphis.

2:00- 2:30—"Asthma, Bronchitis and Hay Fever: Psychological Aspects and Treatment"—Oscar Hansen-Pruss, M. D., Assistant Professor, Duke University, Durham, N. C.

2:45- 3:30—"Emotional Factors in Industry"—Frederick G. Dershimer, M. D., Medical Division, E. I. du Pont de Nemours Company, Wilmington, Delaware.

Wednesday Evening

7:00—Reception and Dinner. Speakers and guests: C. Charles Burlingame, M. D., Psychiatrist-in-Chief, Institute of Living, Hartford, Conn.; Thomas A. Bess, M. D., president, West Virginia State Medical Association; Thomas G. Reed, M. D., president elect, West Virginia State Medical Association; and Mr. Charles Lively, Executive Secretary, West Virginia State Medical Association.

Thursday Morning, October 7

9:30-10:15—"Modern Methods of Psychiatric Treatment in Mental Institutions"—R. Finley Gayle, M. D., Medical College of Virginia, Richmond.

10:15-11:00—"Clinic on Neuropsychiatric Problems"—Yale D. Koskoff, M. D., Department of Neurological Surgery, University of Pittsburgh, Pittsburgh.

11:00-11:45—"Psychiatric Aspects of Plastic Surgery"—William Hamm, M. D., Department of Plastic Surgery, Emory University, Atlanta, Georgia.

2:00- 2:45—"Menstrual Disorders"—Robert M. Creadick, M. D., Department of Gynecology, Duke University, Durham.

2:45-3:30—"Phychological Factors in Common Skin Diseases"—Ray O. Noojim, M. D., Department of Dermatology, University of Alabama School of Medicine.

DR. FERNALD FOSTER AT CLARKSBURG

Dr. L. Fernald Foster, of Bay City, Michigan, secretary of the Michigan State Medical Society, will be the guest speaker at the tri-county medical meeting at the Stonewall Jackson Hotel, in Clarksburg, September 2. Harrison County Medical Society is sponsoring the meeting. Doctor Foster was one of the speakers at the Secretaries' Conference, in Charleston, early in the spring.

DR. AMICK NAMED PEDIATRIC CLINICIAN

Dr. Andrew E. Amick, of Lewisburg, has been named by Dr. N. H. Dyer, state health commissioner, as consulting pediatric clinician for Greenbrier and adjoining counties.

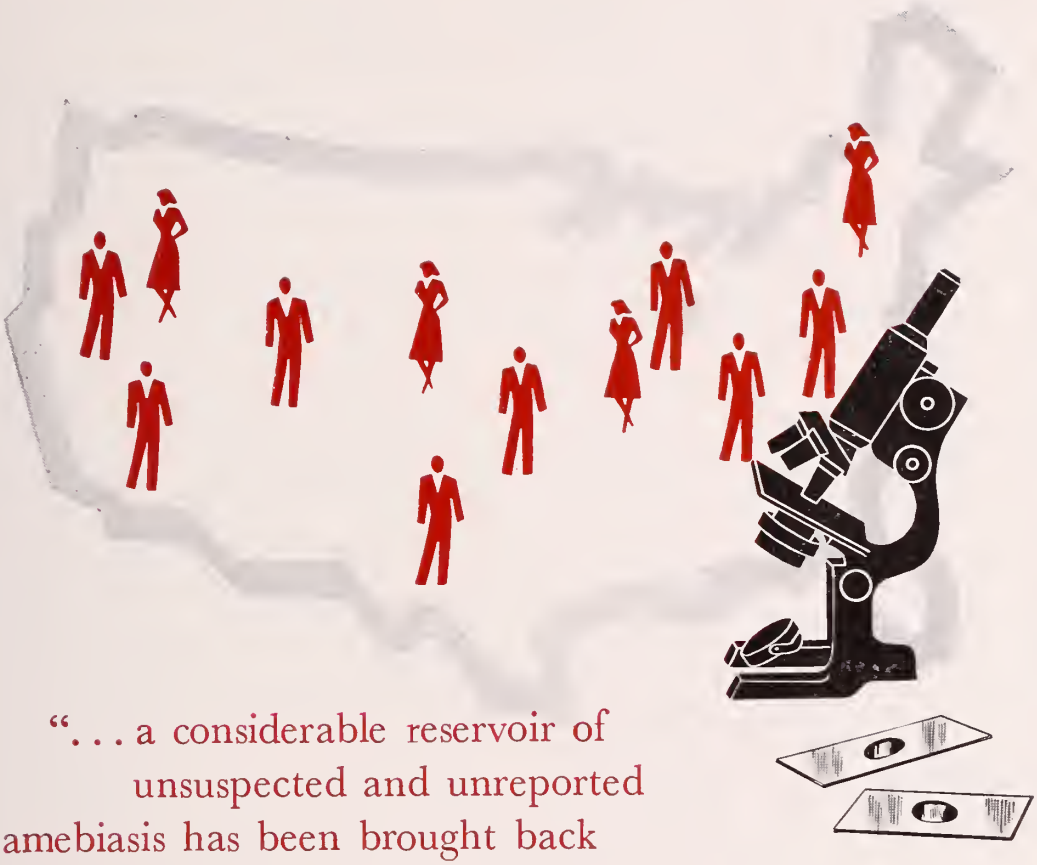
PLAIN TALK

How incalculable is the good will of our practices! A few mornings ago I was telling my not-so-ancient jobbing gardener of the illness of my wife and mentioned that I had called in young Dr. C, who had insisted that she be admitted forthwith to the nearest hospital. The not-so-ancient observed thoughtfully, "Ah! You wouldn't have known old Dr. C, would you, sir?" I replied that he was before my time and the not-so-ancient continued, "Ah! He was a grand doctor he was. Very clever he was, sir. If he said one of his patients wasn't going to get better he never did."—Lancet.

MALPRACTICE ACTIONS

Almost every unjust malpractice claim is precipitated by a physician. If physicians were always able to obtain perfect results there would, of course, be no malpractice actions. But deaths, untoward and unexpected results, continuing disabilities, and complications occur and will continue to occur. Any patient with less than a perfect end-result is a potential malpractice claimant. Whether or not such a patient brings an action is often determined by his feeling toward the physician.

Patients who have a friendly feeling for the physician and patients who believe that everything possible has been done for them are not so likely to sue for malpractice, even in bad result cases. It is otherwise if the patient is resentful of some fancied or actual affront, if he believes he has not been sufficiently closely attended, or above all if some third person raises a doubt in his mind as to he propriety of the treatment.—Louis J. Regan, M. D., Los Angeles.



"... a considerable reservoir of unsuspected and unreported amebiasis has been brought back to the United States...."[1]

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1. *Editorial: The Problem of Amebiasis, J.A.M.A.* 134:*1095 (July 26) 1947.*
2. *Wilbur, D. L., and Camp, J. D.: Amebic Disease of the Cecum: Clinical and Radiological Aspects, Gastroenterology* 7:*535 (Nov.) 1946.*
3. *Morton, T. C. St. C.: Diodoquin for Chronic Amoebic Dysentery in Service Personnel Invalided from India, Brit. M.J.* 1:*831 (June 16) 1945.*

Obituaries

ALVIN THOMAS JORDAN, M. D.

Dr. Alvin Thomas Jordan, 72, of Hurricane, died July 20, 1948, in a Charleston hospital. Death followed a long illness.

Doctor Jordan was born in Mason county, December 26, 1876. He received his M. D. degree at the Illinois University School of Medicine in 1910, and practiced for forty years in Putnam county. He retired in 1947 on account of ill health. He was a former member of the Cabell County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

Besides his widow, he is survived by two daughters, Mrs. Frances Tallman, of Huntington, and Mrs. Helen Knapp, of Nitro; and one son, Gordon Jordan, of St. Albans.

* * * *

JAMES AMYAT MORFORD, M. D.

Dr. James Amyat Morford, 67, of Grantsville, died July 23, at his home in that city. Death followed a short illness.

Doctor Morford received his M. D. degree at the University of Louisville School of Medicine in 1909. After practicing for a year at Spencer, he moved to Grantsville where he remained in active practice until the time of his death. Besides serving as health officer for Calhoun county for a number of years, he had served several terms as a member of the Calhoun county court, and one term as a member of the West Virginia House of Delegates from Calhoun county. He was a former member of the West Virginia State Medical Association and the American Medical Association.

Besides his widow, Mrs. Margaret (Stalnaker) Morford, he is survived by three sons, J. William, of Parkersburg, and James and Warren, of Grantsville; a daughter, Mrs. Katherine Kiser, of Athalia, Ohio; and a brother, Ralph Morford, and a sister, Mrs. John Burdette, both of Spencer.

SYLVESTER AMOS DRAPER, M. D.

Dr. Sylvester Amos Draper, 74, who formerly practiced at Huntington, and later at Roanoke, Virginia, died August 16, at his home in Orlando, Florida. He had retired from practice several years ago.

RURAL CLINICAL LABORATORIES NEEDED

The medical profession should not only encourage the opening of new general practices in rural areas, but should also do what is necessary to provide better distribution of the modern clinical laboratory aids, without which the general practice of medicine tends to become dull and uninteresting, and somewhat less than satisfactory.— J. Indiana St. Med. Assn.

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Book Reviews

CORONARY HEART DISEASE—By A. Carlton Ernstene, M. D., Chief of the Section on Cardiovascular Disease at Cleveland Clinic. Pp. 102. Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois. Price $2.50.

This monograph is one of the American Lecture Series. The lack of illustrations does not lend to easy reading, but the print is good and the material well organized. Seventy-one references have been carefully selected and nicely evaluated to make this feature of the monograph outstanding. These references include a survey of the literature up to early 1947.

The terminology used throughout with reference to disease of the coronary arteries is clear and never confusing. Modern concepts of coronary artery disease are advanced at all times. The pathology of coronary occlusion and the pathological physiology of coronary insufficiency are discussed in an unusually lucid manner. The consideration of the available coronary collateral circulation, both functioning and potential, is very satisfactory. Remarks as to treatment present nothing new but provide a good review. Electrocardiographic patterns in coronary artery disease are only briefly discussed.

Chapters on Paroxysmal Nocturnal Dyspnea, Heart Block and Disturbances of Cardiac Rhythm and on Congestive Heart Failure present nothing new. The chapter on The Risk of Anesthesia and Surgical Operation in Patients with Coronary Heart Disease is especially good. The concept that diseased coronary arteries must be protected during anesthesia from anoxia and from the embarrassing effect of shock and its associated hypotension is advanced and supported convincingly.

This monogram can be recommended. The excellent references, the clarity of the chapters on pathology and its clinical applications, and the chapter on the risk of anesthesia make it a valuable addition to the library of the internist and those interested in cardiology.—Wm. C. Stewart, M. D.

* * * *

DISEASES OF THE CHEST—By Robert Coope, M. D., B. Sc., F.R.C.P., Lecturer in Clinical Medicine, University of Liverpool. Foreword by Lord Horder. Second Edition. Cloth. Pp. 541. The Williams and Wilkins Co., Baltimore, 1948. Price $7.50.

In his preface the author says: "This book is an essay in medical education, an endeavor to set forth, as I see it, how diseases of the chest should be taught," and, in the Foreword, Lord Horder makes the statement that "the author's purpose [is] to present disease in all its bearings and not in its academic aspects only." With these statements as to objective before us, we believe the author has accomplished his purpose, at least in a large degree.

The volume is a revised edition of that first issued in 1944, contains only 18 more pages, and the chief revision is in the bronchopulmonary anatomy which has

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been brought to conform more closely to the modern American concept emphasizing the bronchopulmonary segments. The book is apparently written primarily for the medical student in the clinical years. Much space is devoted to physiology, and to symptoms and physical signs with the mechanisms of their production. The chapter on history taking is fine and demonstrates well the value of tact and patience, and the necessity of allowing the patient to "have his talk out."

The discussion of tuberculosis is very good except that there is no mention of streptomycin. The chapter on Bronchial Carcinoma is excellent and the diagram illustrating the metastatic sites of bronchial carcinoma is especially illuminating. The presentation of fungus diseases is very inadequate and histoplasmosis is not even mentioned. Silicosis is well covered. Pulmonary infarction is satisfactorily presented except as to treatment. The use of heparin as a preventive measure is barely touched upon, and dicumarol is not even mentioned. There is a paucity of x-ray plates which is refreshingly at variance with the recent American tendency to make the chest literature top-heavy with them.

The author has produced a book which, in our judgment, is excellent for the undergraduate and very helpful to those in actual practice. The style is pleasing, the text readable, and, all things considered, the volume is well worth while to anyone interested in chest work.—Walter E. Vest, M. D.

* * * *

GIFFORD'S TEXTBOOK OF OPHTHALMOLOGY (Fourth Edition)—By Francis H. Adler, M. D., Professor of Ophthalmology, University of Pennsylvania Medical School. Pp. 512, with 310 illustrations. Philadelphia and London: W. B. Saunders Co. 1947. Price $6.00.

In this revision of Gifford's textbook, Dr. Adler has kept to the original purpose of the book to make it suitable as a text for the medical student and the general practitioner. The book has been almost completely revised. New chapters dealing with "Ocular Disorders Due to Diseases of the Central Nervous Sys-

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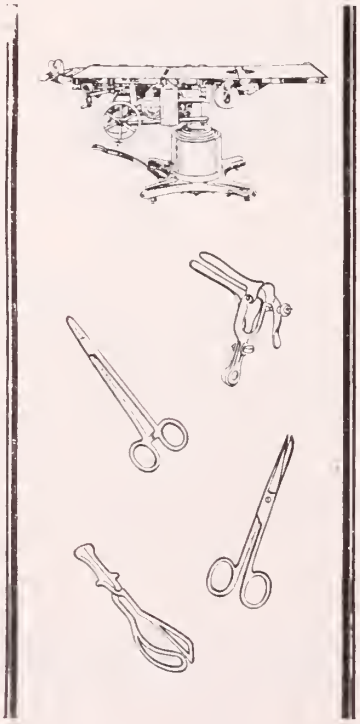

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tem" and "Ocular Manifestations of General Diseases" have been included. The chapter on "Disturbances of Ocular Motility" is also new and is well done, reflecting Dr. Adler's intense interest in the physiologic approach.

It is the opinion of the reviewer that this book should be very popular with the medical student and general practitioner. Some of the material may be a little advanced for the average non-specialist. While it is not recommended as a reference book for the specialist, he may do well to pay particular attention to the new chapters mentioned above.

This new addition of Gifford's well known textbook reviewed by Adler is excellent and deserves wide use. The material is authentic and so styled as to afford pleasant reading.—A. C. Chandler, M. D.

* * * *

MEDICAL WRITING—By Marris Fishbein, M. D., Editor, The Jaurnal of the American Medicol Association, with the assistance of Jewel Whelon, Assistant ta the Editor. Second Editian. Pp. 292, with 36 illustrations. The Blokistan Company, 1012 Wolunt St., Philadelphia 5, Po. 1948. Price $4.00.

The material in this book has been developed as a result of handling thousands of manuscripts for the Journal of the American Medical Association and the various special periodicals published by the Association.

Valuable and important suggestions have been well integrated in this new edition and helpful new suggestions are presented in the chapter on indexing by Miss Laura E. Moore and in the chapter on illustrations by Mr. William Brown McNett.

The book will be of service to physicians and writers in all scientific fields preparing articles ranging from the briefest report to a full treatise. It offers help in formulating style, abbreviation, spelling and capitalization rules, proofreading, and indexing, as well as the essential knowledge needed to assure proper treatment of a scientific or medical subject and give expert guidance in the display of individuality and literary talent.

AM. BOARD OB. AND GYN. EXAMINATIONS

Several changes in Board requirements and regulations were made by the American Board of Obstetrics and Gynecology, Inc , at the annual meeting in Washington, May 16-22, 1948. New bulletins containing full details of the new regulations are now available for distribution upon request. These relate both to candidates and to hospitals conducting residency services for training.

The next scheduled examination (Part I), written examination and review of case histories, for all candidates will be held in various cities in the United States and Canada, Friday, February 4, 1949. The deadline for filing applications is November 1, 1948. Application forms and bulletins will be sent upon request. Interested doctors should communicate with the American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

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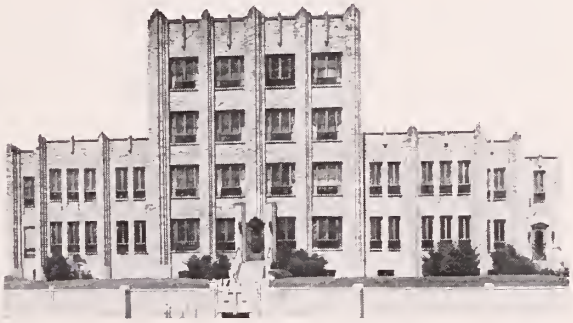

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LEWELL S. KING, M. D.

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WANTED—Staff physician for 1800-bed mental hospital in West Virginia; psychiatric experience desirable but not essential; $375.00 to $400.00 per month including full family maintenance; newly decorated and furnished quarters; hospital located one block from center of city. Include complete qualifications and references in first letter; address Superintendent, Weston State Hospital, Weston, West Virginia.

FOR SALE—Small used hospital sterilizer, Wilmoth-Castle, consisting of utensil sterilizer, sterile water tanks, autoclave and instrument sterilizer. Steam. Mounted on single frame. Write P. O. Box 669, Richwood, West Virginia.

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WANTED BY THE FBI

Hugo Bob Hubsch, with aliases Robert C. Glass, R. C. Harris, Hogo Hobsch, Louis S. Miller, is being sought by the Federal Bureau of Investigation. On November 7, 1945, a federal grand jury at Jackson, Mississippi, returned an indictment charging this man with a violation of the National Stolen Property Act. He is charged with another violation of the National Stolen Property Act in a complaint filed with a U. S. Commissioner at Birmingham, Alabama, on June 7, 1948. This individual is alleged to have defrauded numerous physicians and hospitals in eastern and southeastern sections of the country during the past few months through the medium of fraudulent checks.

Investigation has revealed that Hubsch has a chronic kidney ailment and it has recently been ascertained that he has a large kidney stone in the right ureter about four inches below the kidney. This condition has caused local inflammation which, at varying intervals, results in almost unbearable pain. He has been advised that it would be nceessary for him to undergo major surgery for the removal of the stone in the near future and until that surgery is performed he will need frequent, if not continuous, medical attention. He moves about rapidly in that section of the United States which is east of the Mississippi River.

The following is a composite description of Hugo Bob Hubsch: Age, about 52, claims to have been born Budapest, Hungary, November 4, 1895; height, about 5'6"; weight, 140 to 170 lbs.; hair, dark brown, graying; eyes, brown; build, medium; race, white; nationality, believed to be naturalized American; occupations, laborer, pharmacist; scars and marks, left arm partially paralyzed, needle scars on both arms, large scars above each hip resulting from kidney operations, shrapnel scars and two bullet scars on abdomen, bridge in upper front teeth; characteristics, long nose, stooped posture.

Anyone having information concerning the whereabouts of this man should immediately notify the nearest office of the Federal Bureau of Investigation or your local law enforcement agency.

PG COURSES IN CHEST DISEASES

The Council on Postgraduate Medical Education of the American College of Chest Physicians is sponsoring three postgraduate courses this fall in the latest developments in the specialty of diseases of the chest. Each of the courses will be of one week's duration and will be open to all physicians. Tuition fee is $50.00 for each course, and registration is limited to fifty physicians for the courses being presented in Chicago and New York City. Reservations will be accepted in the order received.

The first course is scheduled for San Francisco, September 13 through 17. The Chicago course will be held at the Hotel Stevens, September 20 through 25, and the New York course at the Hotel New Yorker, November 8 through 12.

Application should be mailed immediately to American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

3,000 ARMY HOSPITAL BEDS FOR VETERANS

Over 3,000 beds in Army hospitals throughout the United States have been allocated for treatment of veterans. The allocations were made at the request of the Veterans Administration. According to Major General Raymond W. Bliss, Surgeon General of the Army, beds allotted for veterans may be used partly for treatment of chronic disabilities, with 325 set aside specifically for tuberculosis cases at Fitzsimons General Hospital in Denver. None of the beds allocated will be used for patients who can be treated in domiciles.

ASSN. AM. MEDICAL COLLEGES TO MEET

The 1948 annual meetings of the Association of American Medical Colleges will be held November 8-10, at The Greenbrier, in White Sulphur Springs. An interesting program has been arranged, including a round table conference devoted to internships. Representatives of hospitals, medical colleges, and intern committees will participate in the discussion.

Another important topic for discussion will be the financing of medical schools and medical education. Room reservations may now be made directly with the management at The Greenbrier, White Sulphur Springs.

LONALAC

Lonalac, nutritionally similar to whole milk powder but virtually free of sodium, aids in the maintenance of protein nutrition when milk, meat, eggs and cheese must be restricted. Congestive heart failure, hypertension and toxema of pregnancy have been treated with low sodium diets. Sodium analyses of foods, diet plans, literature on use of low sodium diets and samples of Lonalac are available from Mead Johnson & Company, Evansville 21, Indiana.

A synonym is a word used in place of one you can't spell.—Stokes.

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SPECIALIZED TRAINING IN CEREBRAL PALSY

Eight physicians, surgeons and therapists have been awarded scholarships for specialized training in cerebral palsy by the National Society for Crippled Children and Adults, Inc. This is the first national scholarship program established to meet the challenge of a crippling condition that disables some half-million Americans.

The scholarships were made possbile under the first of six $5,000 yearly grants from Alpha Chi Omega, national women's sorority, which has adopted help to the cerebral palsied as its major national altruistic project. The scholarships will help meet the acute shortage of specialists trained in cerebral palsy, a disability of muscular control which results from damage to control centers in the brain.

The National Society, whose services to all types of handicapped persons is made possible by the annual sale of Easter Seals, is the only agency conducting a nation-wide program on behalf of the cerebral palsied. The recipients of the new scholarships will assist the Society's 2,000 state and local affiliates in expanding cerebral palsy facilities and research through hospital diagnostic and treatment clinics, nursery schools for cerebral palsied children, treatment centers, and special education and recreation projects.

REQUEST RETURN OF SILIFORM AMPULES

The Food and Drug Admniistration has urgently requested druggists and doctors to return all stocks of Siliform Ampuls to the manufacturer, The Heilkraft Medical Company, Boston, Mass. This injection drug, which should be sterile, is potentially dangerous since samples collected on the market contain living organisms.

Siliform is sometimes injected in the belief that it will relieve patients suffering from rheumatism as claimed by the manufacturer. The Food and Drug Administration found the contaminated samples after a routine inspection at the Heilkraft factory disclosed that the Siliform Ampuls had been manufactured without sterilization.

Intensive recall efforts by the manufacturer and the Food and Drug Administration for the past two weeks have not brought in all of the contaminated stocks. The article, which moves slowly, was shipped to 37 states from Maine to California and later was redistributed by wholesalers who cannot trace many of their sales. Some going back as far as 1946 have been found on the market. These ampulus may be in the hands of doctors, hospitals, clinics, and retail and wholesale druggists.

Cook County Graduate School of Medicine

Announces Continuous Courses

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Surgical Technique, Surgical Anatomy & Clinical Surgery, Four Weeks, Starting October 11, November 8.
Surgical Anatomy & Clinical Surgery, Two Weeks, Starting September 27, October 25, November 22.
Surgery of Colon & Rectum, One Week, Starting October 18, November 15.
Surgical Pathology Every Two Weeks.

FRACTURES & TRAUMATIC SURGERY—Intensive Course, Two Weeks, Starting October 25.

GYNECOLOGY—Intensive Course, Two Weeks, Starting October 11.
Vaginal Approach to Pelvic Surgery, One Week, Starting October 25.

OBSTETRICS—Intensive Course, Two Weeks, Starting October 25,

UROLOGY—Intensive Course, Two Weeks, Starting September 27.

MEDICINE—Intensive Course, Two Weeks, Starting October 11.
Personal Course in Gastroscopy, Two Weeks. Starting September 27, November 8.
Gastroenterology, Two Weeks, Starting October 25.
Hematology, One Week, Starting October 4.

DERMATOLOGY—Formal Course, Two Weeks, Starting October 4.
Clinical Course Every Two Weeks.

OPHTHALMOLOGY—Intensive Course, Two Weeks, Starting September 20.
Refraction Methods Four Weeks, Starting October 11.
Ocular Fundus Diseases, One Week, Starting November 15

OTOLARYNGOLOGY—Intensive Course, Two Weeks, Starting October 18.

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1947 HOSPITAL ADMISSIONS

Almost 18 million Americans were admitted to the 6,173 hospitals of the United States in 1947 according to the 1948 American Hospital Directory compiled and published by the American Hospital Association. This represents an average of one out of every eight Americans receiving hospital care.

The average cost of caring for a patient for one day in a general hospital rose from $9.39 to $11.09 in the year 1946-1947, according to the Directory; however, the average income from patients was $9.71, leaving a daily deficit of $1.38 per patient to be made up through voluntary contributions and gifts from the public.

According to George Bugbee, executive director of the American Hospital Association, admissions have increased almost one hundred per cent during the past ten years, 9,221,517 patients having been admitted to hospitals in 1937.

UNIQUE MUSEUM

A new and unique kind of museum for the collection, preservation, and study of the proteins of the blood and other tissues of the bodies of organisms has been established at Rutgers University. This museum is dedicated to the proposition that the proteins of the bodies of organisms are as characteristic as are any of their other constituents and as worthy of preservation and comparison as their skins and skeletons—Science.

PATIENTS' CLUBS

With so many other groups organizing and lobbying, it was perhaps inevitable that patients should fall in line. We now know of hay fever organizations, diabetics' clubs, leagues of former mental hospital patients, and societies for spastics, not to mention incubator alumni and Alcoholics Anonymous. The M. D. has a stake in this movement, since after all the only thing which the members have in common is that they are (or ought to be) under a doctor's care.

These clubs offer the profession an opportunity for sharply focussed public health education, a potent ally in efforts to enact better health legislation, and sometimes a fresh and useful therapeutic tool. Even psychiatry, last bastion of individualized medicine, has accepted group therapy. For any specialty, a patients' meeting offers a first rate opportunity for giving therapeutic advice en masse. Every such club needs a medical adviser, and the wide-awake physician will welcome invitations from an honest organization of patients.—J. Med. Soc. N. J.

ACCEPTS MASSACHUSETTS APPOINTMENT

Dr. Alexander Witkow, director of the bureau of county health work of the state department of health, has resigned to accept a similar position at Worcester, Mass. His resignation is effective October 1. No successor has been appointed.

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THE FAMILY DOCTOR AND CANCER

We need our medical centers for teaching, for research, for proving adequate methods of diagnosis and therapy, and for the special handling of certain illnesses which cannot be treated adequately or practically by an individual physician or even a small community hospital.

Cancer is at current writing an ailment which falls sometimes but not always into this category. We fervently hope that before very long the riddle of this dread disease will be solved. Until that happy day let the medical center furnish the family doctor with every available means for early diagnosis so that having diagnosed cancer he may at once utilize the best available therapy.

It is our firm belief that a family doctor trained in a grade "A" medical school and constantly keeping abreast of the newer developments in his profession can function adequately as a cancer detection unit and that this readily available help should be drawn to the attention of the public.—Westchester County (N. Y.) Med. Bull.

INCIDENCE OF CONGENITAL MALFORMATIONS

Frequently when a mother has given birth to a malformed child, she will ask her physician what the chances are of an anomaly occurring in subsequent children. Many will inform her that the danger is very remote. Actuallly, Murphy, in a study of 826 malformed children, found that the chances for subsequent anomalies were twenty-five times greater than in the general population. (General population, one in 213 births; families with a malformed child, one in eight subsequent births). Environmental factors, with the possible exception of inadequate diet, were not prominent.—Doris Emerson Bowles, M. D., in J. Am. Med. Women's Assn.

NAMED DENTAL HYGIENE DIRECTOR

Dr. George Wyatt, D.D.S., of Louisville, Ky., has accepted appointment as director of the bureau of dental hygiene, state health department. He succeeds Dr. William H. Rumbel, who has accepted appointment as director of a similar bureau in Virginia. Doctor Wyatt, a native of Randolph County, has been serving as assistant director of the bureau of dental hygiene of the state health department at Louisville.

THE NURSING PROFESSION

The nursing profession is a most human method by which the young lady of character and noble interest can serve her community.

As physicians each of us can speak words of encouragement and give much desired counsel to our young friends who have an inclination to follow this honored profession.—Lester D. Powell, M. D., in Polk County (Iowa) Med. Soc. Bull.

THE FOUNDATION PRIZE

The South Atlantic Association of Obstetricians and Gynecologists announces the establishment of "The Foundation Prize." Authors of papers on Obstetrical or Gynecological subjects desiring to compete for the prize may obtain information from Dr. E. D. Colvin, Secretary-Treasurer, 1529 Clifton Road, N. E., Atlanta, Ga.

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LONG TERM RESEARCH NEEDED

There is a great need for a long-term research institute to study the natural history of disease. The ideal situation for such a study would be a medium-sized industrial town with a compact population served by a combined group of hospitals—say a population of half a million. The institute should really be a super-secretarial one, with guiding hands from the professors of medicine, pathology, pharmacology, and child health, whose departments would provide the basic data.

Problems to be investigated might be, to give a few examples: Does bronchial carcinoma occur more commonly in people who were exposed to X-rays in infancy? What is the natural history of bronchitis? Do people who were breast-fed babies have a lower requirement rate for artificial dentures? Do carcinogens applied in cases of infantile eczema predispose to cancer in later life?

Some foundation would have to finance the scheme with a proviso that no findings should be published in less than fifteen years.—The Lancet.

RURAL MEDICAL CARE

It is the opinion of the A.M.A. that medical schools of the United States should be asked to cooperate and join in the attempt to solve the rural health problem. There is no other instrument in organized medicine which can or should lend itself to such a service as easily and efficiently, but a definite program must be submitted to the schools to enhance rather than jeopardize the prime purpose to which they owe their existence.

An example which might well be followed has been set by Colorado University, which has established a residency in general practice following the usual rotating internship of one year. In the residency the graduate will study six months each in medicine, in pediatrics, in obstetrics and gynecology, and in surgery, with allied specialties included under the four main heads. After this training, it is expected that the doctor will be capable of caring for more than 90 per cent of the patients coming to him should he locate in a small town.—J. Kansas Med Soc.

TOLL OF CHRONIC DISEASE

Today, as medical science moves forward in the prevention and cure of infectious disease, chronic illness has become the nation's primary medical problem. In 1900, seven chronic diseases (cancer, diabetes, intracranial lesions of vascular origin, diseases of the heart, diseases of the arteries, cirrhosis of the liver, and acute and chronic nephritis) were responsible for 25.7 per cent of all deaths in New York State. Between 1900 and 1940, a period in which the population of New York State increased by 85 per cent and the total number of deaths increased by only 13 per cent, the number of deaths from this group of chronic diseases increased by 200 per cent, and now includes over two-thirds of all deaths in the state.

Whereas diabetes ranked twenty-seventh and arteriosclerosis thirty-fourth as causes of death in 1900, they were eighth and tenth in 1944.—Howard A. Rusk, M. D., in N. Y. St. J. of Med.

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THE OPHTHALMOSCOPIST AND HYPERTENSION

Ophthalmologists who fail to learn properly to classify hypertension from the retinal changes miss perhaps the most interesting phase of medical ophthalmology. The ophthalmoscopist is able to observe these changes in an objective manner, and, as Lillie remarked, when they are classified corectly, one need not be swayed by subjective symptoms. Thus the ophthalmologist thoroughly trained in ophthalmoscopy has the opportunity to be of great aid to his colleagues in evaluating their cases of hypertensive disease. The general practitioner, the internist, the obstetrician, the urologist and the neurosurgeon likewise are privileged to avail themselves of the assistance of a competent ophthalmoscopist with the requisite knowledge and experience to classify these cases and give advice regarding their management.—Shaler Richardson, M. D., in J. Florida Med. Assn.

GRIPES AND COMPLAINTS

For those who criticize the activities of your county society by saying: "What am I getting out of the society? What has the medical society done for me? I pay my dues each year and get nothing in return," may we suggest the following antidote:

"A horse can't pull while kicking,
This fact I merely mention;
And he can't kick while pulling,
Which is my chief contention."

Get out the harness and hitch them up! Convert their kicking into pulling and the county society will have an active and energetic worker.—J. Tenn. St. Med. Assn.

A SURGEON'S LIFE

A surgeon conducting a difficult case is like the skipper of an ocean-going racing yacht. He knows the port he must make, but he cannot foresee the course of the journey. He must be guided as he goes by changes of the wind and weather, he must constantly seek help from the barometer, the lead, the look of the sky, the B.B.C. weather forecast, and he must plan his course not so much to give the most direct journey as at all stages to avoid possible dangers.

At every point he must know how far he has travelled, where he is, and the limits of error within which his projected position may lie; what dangers and difficulties lie immediately ahead; and how soon he may expect to make port. At every stage he must have a plan, based on a working knowledge of his present position, that will allow him to make for the best of several available harbours should things go wrong, or if none is suitable he must know where to find temporary refuse under the lee of the land till he can resume his journey.—Sir Heneage Ogilvil in The Lancet.

A CHALLENGE

We cannot abdicate our responsibility, as physicians, to try to preserve that professional independence which experience leads us to believe is conducive to the highest grade of medical service. The growing danger of bureaucratic domination is a challenge to believers in independent practice to intensify their efforts for better distribution of medical care and, by the success of voluntary measures, destroy the argument for politically controlled compulsory insurance against sickness.—N. Y. Medicine.

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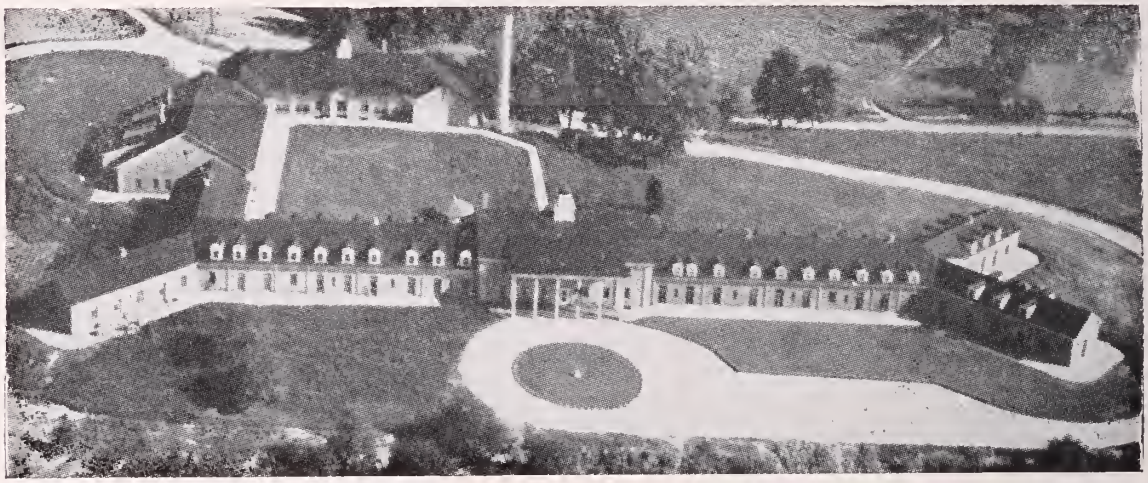

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THE GENERAL PRACTITIONER

Before any physician can be a competent specialist he should be a good doctor, and should be well acquainted with all of the diseases of the human body. It, therefore, might be well to urge that the specialty boards require that each applicant have at least three years' experience in general practice before specializing, and that hospitals reserve a major portion of their resident training positions for men with such experience. The specialty training program then could be lessened, because out of his own experiences the physician would have acquired unusual training that especially fitted him for any type of medical practice.

The general practitioner is a vital part of our system of medical care. He should not be denied the proper use of available hospital facilities. There are certain intricate procedures that must be limited to specialists in that field, and the competent general practitioner will recognize his limitations. Our present system of medical care is very complicated, and no one can cover the whole field. The specialist and the general practitioner are equally necessary.—Cleon A. Nafe, M. D., in J. Indiana St. Med Assn.

EMERGENCY CALLS

The doctors of every town and every district society should be so organized that emergency cals, real or imaginary, are handled with reasonable dispatch. The need has been sounded by the American Medical Association and has been emphasized in these pages. Physicias cannot, however, keep themselves constantly on tap like hot and cold running water, as so many of the unthinking public expect of them. Certainly, organization to meet legitimate expectations should and will be put into operation whenever possible.—New England J. Med.

SOME OTHER ROCK

Recently while riding in the club car of one of the New York Central's best, we picked up a bit of common sense philosophy which we pass on to you. Seated across from us were three men, obviously from deep in the heart of Texas. The train was late and as one of their number wondered whether they would make their St. Louis connection for the last lap of their journey, one of his companions observed "Oh well, what's the difference—as the Georgia cracker said 'if I wasn't sittin' on this rock I'd be sittin' on some other rock'." Maybe he had something.—Westchester Medical Bulletin.

PSYCHIATRIC UNITS IN GENERAL HOSPITALS

The presence of a psychiatric unit in a general hospital will make adequate early treatment available to great numbers of patients who would otherwise not receive it.

The educational and mental hygiene opportunities in a community possessing a psychiatric division in a general hospital are obvious, and over a period of years may well prove effective in determining a more healthy mode of life for many individuals, who will never be seen as patients.—John D. O'Brien, M. D., in Ohio St. Med. J.

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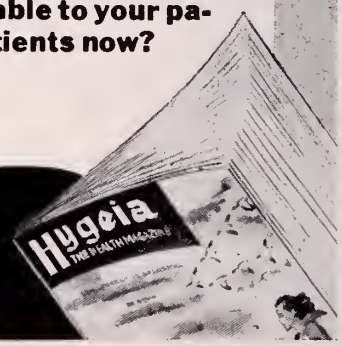

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DIRECT PSYCHOTHERAPY FOR THE AGED

Direct psychotherapy of older people is not so hopeless a task as was once thought. While the disturbances involving specific neurotic and psychotic manifestations require the intervention of the specialist in psychiatry, a large number of the emotional problems presented by these patients can be dealt with satisfactorily by the medical men. If the principles underlying the nature of these disturbances are kept in mind, common sense, sympathy and a little patience will enable physicians to help the elders to greater happiness and reduce to a gratifying extent the chronic burden of their psychosomatic complaints.

One must give them a chance to talk about themselves. However, one must not waste time on sympathy. While some people will lap it up, where sensitive pride is involved, sympathy will be offensive. Respectful attention and an attitude of willingness to try to really understand go a lot further toward bolstering self-esteem. Nothing hurts more than the brush-off with a smile. Nothing helps more than to provide a genuine human contact even if it is on a professional basis.—Maxwell Gitleson, M. D., in Geriatrics.

PSYCHOSOMATIC MEDICINE

Years ago when Aunt Louise went to her family doctor, he already knew that Uncle John was in the State Prison for fraud, that brother Tom had run away with his neighbor's wife, that little Harry was an idiot, and that poor Aunt Louise had been left at the altar when Big John Applejack had eloped with the local peroxide blond. Knowing all these things when Aunt Louise began telling of the pain in her heart, "Doc" did not need an electrocardiogram or a chest x-ray to ascertain whether her illness was functional or pathological.

Living conditions have changed so much that now it takes a well trained psychiatrist several long and expensive interviews to even find out about Big John Applejack. The cardiologist has to worry considerably about the EKG and the chest film, and if she happens to have a little too much QIII poor Aunt Louise is really in a desperate plight.

Psychosomatic medicine is only what the good doctors have been practicing for centuries. True, there is much more medicine known now than ever before, but we know less and less about the human side of our patients. Psychosomatic medicine is a truly conscientious attempt to bridge that gap.

The mind and body must be correlated in most human illnesses. Scabies will respond to sulphur, irrespective of the mental gymnastics of the patient, but scabies might well produce a local social uprising if one of the local nabobs happens to "believe" that scabies is due to filth only and not to a parasite. The breadwinner of a large family, ill with pneumonia, will receive the benefit of the modern miracle drugs, but his despondency over the empty larder may keep his pulse at a high speed.

Such is psychosomatic life.—H. M. Clodfelter, M. D., in Bull. Columbus (O.) Acad. Med.

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GERMAN MEASLES DURING PREGNANCY

The First Report of the Joint Committee of the National Society for the Prevention of Blindness and the American Academy of Pediatrics includes 132 mothers who had German measles during the first trimester of pregnancy, and of the babies born of these 132 pregnancies only 18 were normal. Sixty-two weighed less than six pounds at birth; 76 had congenital cataracts; 35 were deaf; 22 were microcephalic and 46 mentally retarded. Malformations of the heart were diagnosed in 67. Disturbances of the eye, other than congenital cataracts in 13, included congenital glaucoma, microphthalmus, chorioretinitis and strabismus. Hyposadias was observed in four, inguinal hernias in four, malformations of the extremities in three, cleft palate in three, harelip in one. There was in the lot one cretin, one mongolian idiot.

The subject should be discussed now in every county medical society, and acted on now.—So. Med. and Surg.

CURING COMMON WARTS

Common warts on the glabrous skin are cured with greatest certainty by destructive measures. My personal preference is for electrodesiccation. After anesthesia with procaine, the wart is desiccated until it turns white. The end point is when a certain sudden incandescence occurs beneath the wart. Then with manicure scissors the wart is freed from the normal skin around it, after which the base is thoroughly curetted.

If electrodesiccation is not available, a fine tipped actual cautery can be used. If neither is available one can free the wart with fine scissors, curette the base thoroughly and paint the dry base with pure phenol. With any of these methods some scarring is apt to result, of which the patient should be warned in advance. If it is desirable to avoid all scarring and an open wound, x-ray or radium may be used.

Both of these are excellent treatments for warts even though the 72 per cent rate of cure reported by the Mayo Clinic following their use is definitely lower than that obtained by destructive measures.—H. J. Templeton, M. D., in California Medicine.

PREVENTIVE MEDICINE AND PUBLIC HEALTH

When we stop to look at it, there are surprising similarities between public health and industrial medicine.

The physician actually working in the plant almost invaribly becomes interested in prevention. As soon as the average doctor begins to see repetitious pathology, he automatically seeks a common cause. If a common cause can be discovered and eliminated, that is preventive medicine and public health. This is often, but not so universally, true of the physician who sees industrial cases in his office.

Preventive medicine on a mass scale is public health. The plant physician or industrial director is frequently referred to as the health officer of the plant.—W. P. Shepard, M. D., in Industrial Medicine

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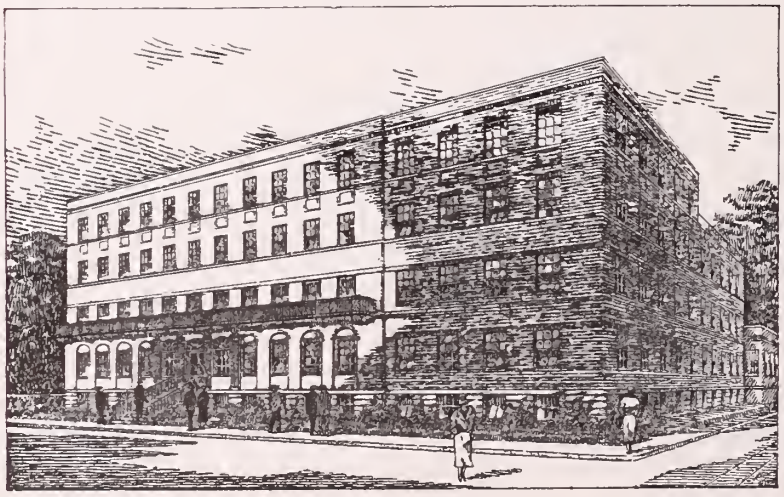

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THE PHARMACOLOGY OF THE ANTIHISTAMINIC AGENTS

By DAVID FIELDING MARSH

Department of Pharmacology, School of Medicine, West Virginia University, Morgantown, W. Va.

Drugs which are capable of diminishing or preventing the effects of histamine and which do so by a mechanism other than the production of pharmacologic responses diametrically opposed to those produced by histamine are termed histamine antagonists or antihistaminic agents. Epinephrine and related compounds are not considered antihistaminic agents since they produce prominent effects such as bronchodilation, vasoconstriction, mydriasis, and inhibition of intestinal activity which represent the antithesis of those produced by histamine. True antihistaminics are able to antagonize histamine without eliciting pharmacologic responses that have a causal relationship to the histamine antagonism.

After almost a half century of research by numerous investigators, it now seems likely that the antigen-antibody reaction is the basic mechanism in anaphylaxis and most forms of allergy. This reaction appears to be responsible for the production or liberation of pharmacologically active humoral substances which cause the major symptoms encountered. Much of the past work has been concerned with the demonstration that histamine or a similar substance is the common denominator for many, though probably not all, of the important allergic manifestations.

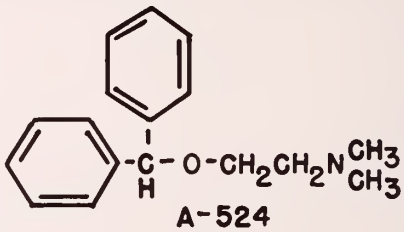
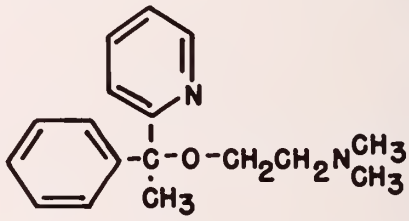
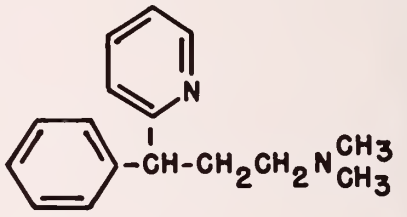
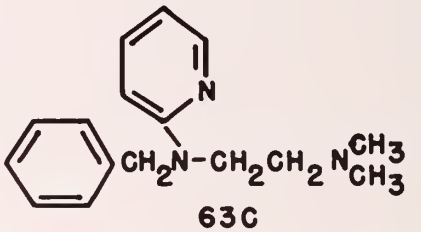
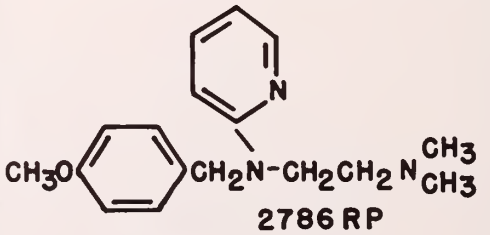
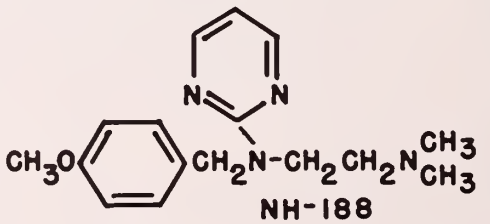
Histamine was synthesized in 1907 by Windaus and Vogt. Subsequent studies of this drug have shown it to be one of the most potent pharmacologic agents known. It is normally present in the tissues of all animals, for the most part in a bound and inactive form, and can under certain conditions be released from the cells. Liberation of histamine into the blood stream in an active form presumably results from the intracellular reaction of antigen and antibody. The onset and duration of allergic signs and symptoms have been shown experimentally to coincide with elevated levels of histamine in the blood, lymph and reacting tissues. Evidence that histamine or a histamine-like substance is one of the causative agents of allergic and anaphylactic reactions is furnished by the conspicuous similarity in the responses of sensitized animals to histamine and to a specific antigen.

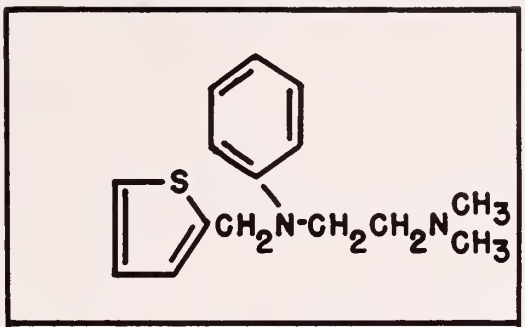
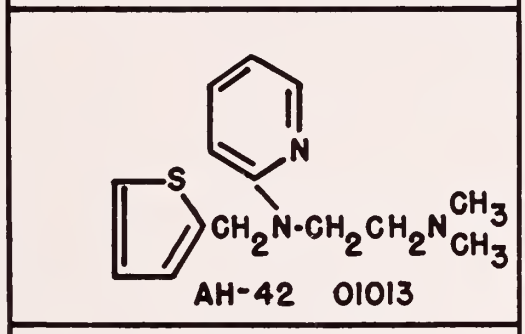
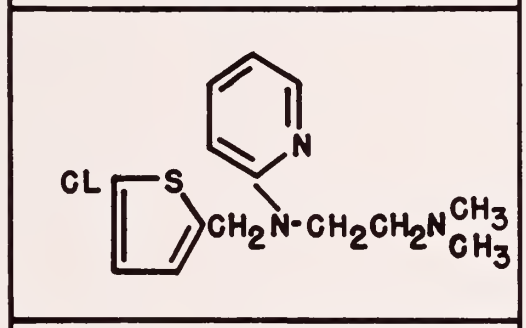
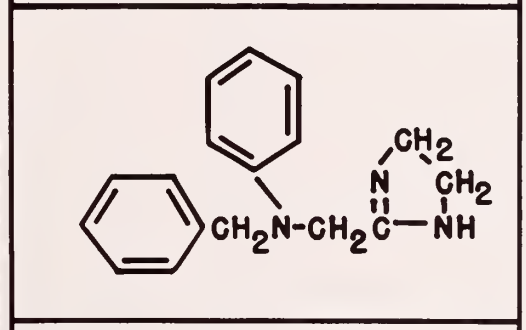
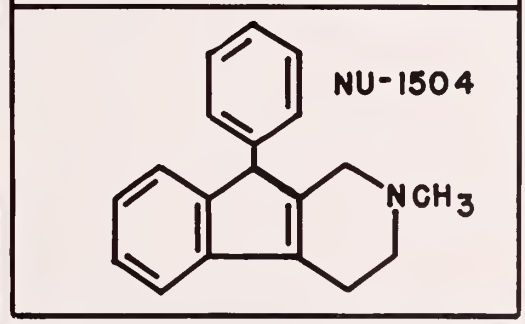
HISTORY

Bovet and Staub, working with many of the Fourneau compounds, discovered that several phenolic ethers and derivatives of ethylenediamine had the ability to protect guinea pigs from lethal doses of histamine. Intensive research by their group and competitive groups in this country have led to the development of several clinically useful compounds, most of which have some chemical relationship to the original agents. Since all of these agents are very similar clinically and differ only in minor aspects of side-effects and dosage preparations, they will be discussed as a group.

CHEMISTRY

The synthesis of the compounds listed in the table is difficult. The agents are reasonably stable. Like most alkaloids, the free bases of

Public Name	*Trade Name*	*Investigator*	*Formula*	*Comment*	*Prepar*
Diphenhydramine Hydrochloride	Benadryl (Parke, Davis)	Chemistry: Rieveschl and Huber (1944) Pharmacology: Loew (1945)	 A-524	Oldest known, clinically, in this country. Greatest incidence of hypnosis and drowsiness.	25 mgm capsu 50 mgm Kapse 0.25% el 1.0% inj solutic
Doxylamine Succinate	Decapryn (Merrell)	Chemistry: Tilford, Shelton and Van Campen (1948) Pharmacology: Brown and Werner (1948)		Long duration of action. Drowsiness.	25 mgm
Prophenpyridamine	Trimeton (Schering)	Chemistry: Papa, Sperber, and Schwenk (1948) Pharmacology: Tislow (1948)		Early reports, indicate very high clinical potency.	25 mgm
Tripelennamine Hydrochloride	Pyribenzamine (Ciba)	Chemistry: Scholz (1946) Pharmacology: Mayer (1945)	 63C	Gastrointestinal side effects more predominant. Low incidence of drowsiness.	50 mgm 2% ointm 2% crean 0.5% elix
Pyranisamine Maleate	Neoantergan (Merck)	Chemistry: Horclois (1943) Pharmacology: Bovet (1944)	 2786 RP	Experimentally, most potent agent clinically available. Clinically, very similar to others.	25 and 5 coated tablets
Thonzylamine Hydrochloride	Neohetramine (Nepera)	Chemistry: Tolstoouhov and Friedman (1948) Pharmacology: Reinhard and Scudi (1947)	 NH-188	Very low incidence of undesirable effects.	50 mgm t

ublic Name	Trade Name	Investigator	Formula	Comment	Preparations
	Diatrin (Warner)	Chemistry: Kyrides, Meyer, and Zienty (1947) Pharmacology: Ercoli, Schachter, Hueper and Lewis (1948)		Low incidence of drowsiness and other side effects.	50 mgm coated tablets
enylpyramine drochloride thapyrilene drochloride	Histadyl (Lilly) Thenylene (Abbott)	Chemistry: Weston (1947) Pharmacology: Lee, Dinwiddie and Chen (1947)		Clinically very similar to others.	25, 50 and 100 mgm tablets
lorothen rate	Tagathen (Lederle)	Chemistry: Clapp, Clark, Vaughan, English, and Anderson (1947) Pharmacology: Litchfield, Adams, Goddard, Jaeger, and Alonso (1947)		Low incidence of drowsiness.	25 mgm capsules 25 mgm tablets 2% ointment
enazoline drochloride, lfate, and thane- fonate.	Antistine (Ciba)	Chemistry: Miescher (1946) Pharmacology: Meier and Bucher (1946)		Lower potency. No local irritation. May produce wakefulness.	100 mgm tablets 0.5% collyria 1% elixir
enindamine id Tartrate	Thephorin (Hoffman-La Roche)	Chemistry: Wenner and Plati (1946) Pharmacology: Lehmann (1947)		High potency. Few side effects. May produce stimulation and wakefulness.	25 mgm coated tablets

As well as these agents that are currently commercially available, several similar agents have been thoroughly investigated. Among them may be mentioned "Antergan" (phenyl analog of tripelennamine), "Hetramine" (pyrimidyl analog of tripelennamine), "3015RP", "3277RP", and "Pyrollazote" (thiodiphenylamine derivatives), "Bromothen" (bromine analog of chlorothen), and "Brombenzyl DPE" (bromine derivative of tripelennamine).

these compounds are oils but various salts are crystalline and water soluble.

ABSORPTION, FATE AND EXCRETION

Oral administration is the only satisfactory route for the production of systemic effects. The agents are quite bitter and most of them, in high concentration, produce a peculiar local anesthesia of the throat. They should be given cautiously as simple tablets, and better as capsules, coated tablets, or in elixirs. Absorption from the gastrointestinal tract is apparently prompt and complete, but dosage over forty-eight to seventy-two hours may be required before the desired therapeutic effects are obtained. Intramuscular and subcutaneous administration are irritating and not indicated. Intravenous administration produces precipitous falls in blood pressure and is hazardous. Topical or local administration of certain ointments has proved effective for certain skin conditions as has the use of solutions in the eye, and perhaps the employment of the agents as aerosols for inhalation may be useful. The fate and excretion are unknown, but it is assumed that they are excreted more or less unchanged into the urine.

MECHANISM OF ACTION

The antihistamine drugs act as histamine blocking agents, decreasing or abolishing the effects of histamine on smooth muscle and endothelial cells. These chemical compounds do not exert their protective action as antispasmodics, sympathomimetics, or atropine-like substances. The antihistaminics have little pharmacodynamic action *per se* in that they do not prevent the formation or release of histamine or histamine-like substances. The antihistaminic agents quantitatively compete with trigger cells of smooth muscle; the antihistaminic-effector substance complex is ineffective as far as producing the typical muscular response, but it is stable enough that it prevents the formation of any histamine-effector substance complex which would normally cause the muscular response. By this competitive inhibition the agents protect the organism against the effects of histamine, whether it be injected into the organism experimentally or released from its bound form in the tissues, as apparently happens in many allergic reactions.

SYSTEMIC EFFECTS

Specifically, these agents block or prevent the effects of histamine and its chemical relatives, and such other chemicals, drugs, or conditions that bring about the release of histamine or other materials that produce similar effects in the body.

Nonspecific, transient, side-effects are encountered in as high as 40 per cent of patients receiving some of these agents. In a few instances it is necessary to discontinue therapy because of the severity of such reactions. The most common side-effects noted are: drowsiness, dizziness, weakness, mental confusion, fainting, dryness of mouth, throat, and nose, nausea, headache, nervousness, palpitation, intestinal cramps, and diarrhea. These effects are most noticeable a few hours after taking the first dose, and often become less noticeable as therapy is continued.

THERAPEUTIC USE

Palliative relief is usually obtained by systemic administration to patients with urticaria, hay fever and vasomotor rhinitis, allergic drug reactions, serum reactions, contact dermatitis, dermographism, erythema multiforme, and pruritus. Some cases of bronchial asthma, angioneurotic edema, atypical histaminic cephalgia, and eczema are benefited. Only a few individuals with migraine, dysmenorrhea, gastrointestinal food allergy, and radiation sickness have been relieved. Local applications of ointments and creams often provide relief for allergic skin involvements without so much hazard of production of systemic side-effects. Local applications of dilute, buffered solutions in the eye provide relief for allergic conjunctivitis. Aerosol inhalation provides relief in a few asthmatic individuals.

ABUSE

The intense enthusiasm for new drugs often leads to their irrational use for conditions in which they are not indicated. Continued abuse may lead to professional distrust with resultant abandonment of an efficacious drug or even to cumbersome legal control. These agents do not act immediately or even promptly; in allergic crises the judicious use of epinephrine or a similar sympathomimetic agent is indicated. These agents do not prevent the allergic response in the body; they prevent only the resultant symptoms; with allergies to known causal agents, avoidance of contact or gradual desensitization to the allergen produces much less physiologic imbalance in the body and much less hazard of undesirable effects. These agents do not adequately alleviate the effects of virus invasions and they may also mask the signs of serious secondary infection so that treatment may be difficult, delayed, or impossible.

DOSE

The nominal therapeutic dose is 25-100 mg. three or four times per day. The upper range is

indicated for severe cases, the lower for milder conditions. Once relief is obtained with a given dose, it may be possible to control the condition with a considerably lower dose. Children are given one-third to one-half the dose. Taking the drug with food minimizes the undesirable side-effects. Those who experience extreme drowsiness may be given ephedrine, caffeine, or some other cerebral stimulant, although the added loss of psychic inhibition may lead to asocial exhibitions in poorly balanced individuals. Patients who become drowsy, dizzy, or unduly nervous after taking the drug should be warned against undertaking activities that require close attention and alertness, such as driving automobiles. It is recommended that a single 25-50 mg. dose be given as a "test dose" before treatment is begun, to determine the individual's tolerance to the particular drug, although individuals intolerant to one agent are often intolerant to several of the others. Although no symptoms indicative of chronic toxicity have been observed, it is suggested that therapy be continued only eight weeks at a time.

BIBLIOGRAPHY

Many excellent articles on antihistaminic agents are appearing in current medical journals. The following are given as sources of key references and to indicate the types of methods used for research with this type of agent:

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STREPTOMYCIN WORTH PROVED

The common types of chronic pulmonary tuberculosis often progress in a series of acute steps. One of the greatest potential uses for antibacterial drugs is in treatment of newly spreading lesions before they have caused irreversible damage of the lung. Streptomycin has clearly proved its worth under such circumstances.

Some of the most distressing and dangerous complications of pulmonary tuberculosis have yielded unmistakably to streptomycin. Previously, we had no satisfactory treatment for such discouraging complications as tuberculosis of the larynx and tuberculosis of the intestine. Now, streptomycin is a proved remedy of great value in many such cases.

Streptomycin has also been used in several types of tuberculosis involving other parts of the body, aside from the lungs. Some crippling, disfiguring, and even potentially fatal types of tuberculosis of children and adults have been benefited to varying degrees and for varying periods, most frequently when streptomycin has been used in combination with surgical treatment and other measures.—H. Corwin Hinshaw, M. D., in NTA Bulletin.

HYPERTENSION TODAY*

(PART II—THE RICE DIET)

By MAX KOENIGSBERG, M. D.,
Assoc. F. A. C. P., Charleston, West Virginia

It would not be amiss to open this discussion by quoting from the writings of Snapper,[1] well known observer on diseases of the Orient: "In general, the diet of the native inhabitants of the Orient consists mainly of carbohydrates, with the fat and protein intake remarkably low. In most of the standard diets of the Occident, the ratio of carbohydrates to proteins and fats, by weight, varies around 4:1:1, that is, about 55 per cent of the total caloric intake is derived from carbohydrates, 14 per cent from proteins and 30 per cent from fats. In the Orient, however, 80 per cent to 85 per cent, sometimes even 90 per cent, of all the calories, is derived from carbohydrates, 5 to 10 per cent from proteins, and about 7 to 8 per cent from fats. Even this small amount of protein is mainly of vegetable origin. Since no animal fats are used, the cholesterol intake is practically nil . . . Whereas, in the United States blood cholesterol values of 250 to 300 milligrams per hundred cubic centimeters are customary, in the Orient the values usually range around 150 milligrams per hundred cubic centimeters. These low cholesterol readings are certainly not a genetic characteristic since careful studies have shown that the blood cholesterol of Javanese persons serving as waiters on luxury ships reached levels comparable to the Occidental figures." Snapper[2] found that diseases connected with cholesterol infiltration are uncommon amongst Orientals and feels that the low blood cholesterol levels may account for the fact that arteriosclerosis is relatively rare in the Orient. It was not unusual that not a single case of coronary thrombosis was seen in the electrocardiography department of the Department of Medicine of Peiping Union Medical College during an entire year.

Since Kempner[3] and his associates at Duke University began to use the rice diet for the treatment of hypertension there has been considerable discussion pro and con in regard to its merit. It should be clearly understood that the rice diet is not intended (nor is it practical) for routine use in cases of mild hypertension. The chief complaint made against the diet is that few patients will stick to it long enough to obtain satisfactory results. It has been my observation that only those patients who have marked cere-

*This is the second of a series of three papers on hypertension prepared for publication in The Journal. The third will appear in the November issue.

bral, retinal, cardiac or renal symptoms are willing to try this diet, and that therefore as a practical measure its use should be encouraged largely in patients with cardiac failure, uremia, encephalopathy, or retinal damage. Of course, its use in persons with moderately severe hypertension in whom the complications just mentioned are impending may very well forestall their onset. Kempner has shown by objective results such as the loss of edema, clearing of albumin and casts in the urine, return to normal of increased nitrogen and cholesterol readings, appreciable drop in blood pressures, clearing control of papilledema, hemorrhages and exudates in the eyes, decrease in the size of the heart, and elctrocardiographic improvement, that 65 per cent of these patients can be helped. In his original study of 213 patients subjective improvements such as loss of headache and dizziness were not considered as criteria of improvement in evaluating the beneficial effects of this treatment.

White,[4] who visited the Kempner Clinic one month prior to reading his paper at the annual meeting of the American College of Physicians, Chicago, April 30, 1947, reported: "I saw cases (Durham, North Carolina) who had achieved a normal blood pressure by this therapy who had failed by other procedures, and it seems fair to me to suggest to some individuals, especially to those who obviously are unsuited for surgery, to try this diet; *in fact, it is quite reasonable to try this first for if it proves unsuccessful it is still possible to operate. Although the diet is difficult to take, surgery may be even more so.*"*

Flipse and Flipse[5] draw the following conclusions from a study of 32 cases kept on a strict and modified rice-fruit routine for a two year period: "(1) A strict rice-fruit routine was effective in controlling the blood pressure in 62.5 per cent of cases of essential and renal hypertension in ambulatory patients. (2) Benefits from the strict diet are shown promptly within a maximum period of six weeks. (3) Weight loss is not a significant factor in the benefits produced by the diet. (4) The diet is of benefit in cases of chronic uremia and marked edema where other treatment has failed even though in some cases the blood pressure fails to decline. (5) Restriction of water is not necessary. (6) Ten of 14, or 71.5 per cent of those benefited by a strict routine maintained the improvement when the diet was modified with vegetables, meats or even a small amount of salt.

Kempner, who originated the rice diet for the treatment of kidney disease and hypertensive vascular disease believes that this diet compensates *renal metabolic dys*function by replacing the ordinary mixed diet with a diet limited to rice, fruit, sugar, and fruit juices, supplemented with vitamins and ferrous sulfate.

It probably would be best to attempt to explain the rationale of the rice diet by quoting *in toto from Kempner*[6]: "If for the moment we disregard the renal *excretory* function and consider the kidney only as an organ of *metabolism* we can assume, as a basis for experimental approach, that pathological conditions of the kidney *may* lead to the following changes:

(a) Substances which are normally removed by the kidney cell metabolism may increase in amount in the blood or tissue fluids.

(b) Substances which are normally produced by the kidney cell metabolism may decrease in amount.

(c) Some of the substances normally metabolized by the kidney cells may be metabolized vicariously by the liver cells, with a resulting increase in the metabolic products of the liver cells.

(d) 'Abnormal' substances may appear in blood or tissue fluids which under physiological conditions exist only in an intermediary nonapparent phase of the kidney cell metabolism, since normally they are immediately further metabolized to harmless end products.

If we assume that some of these 'abnormal' substances which appear when the metabolic function of the kidney cells is disturbed are 'harmful' and play a role either directly or indirectly in the development of hypertension, vascular retinopathy, encephalopathy, heart lesions and new kidney disease, the *working hypothesis* suggests itself: that the ordinary mixed diet may contain constituents which increase the production of these 'abnormal' harmful substances by the diseased kidney cells. Starting from this *working hypothesis* we have tried to compensate renal metabolic dysfunction by replacing the ordinary mixed diet with the rice diet."

Roughly one may calculate that about 75 per cent of kidney function is spent upon the excretion of urea. Moreover, this is particularly important in view of the fact that the urea nitrogen in patients on the rice diet over a twenty-four hour period is one-fifth less than in those on a starvation diet. Thereby one is correct in assuming that the rice diet decreases the load placed

* Italics ours.

upon the kidney. Finally, the vegetables protein end products can be excreted while the catabolic products of animal protein cannot be excreted properly by the pathologic hypertensive kidney.

My personal experience in 18 cases entirely substantiates the value of this diet in properly selected cases. Of the 18, two dropped the regimen too early to be considered; 10, or 63 per cent of the remaining 16 cases, achieved good objective results; 2 other patients experienced considerable subjective improvement as evidenced by relief of their symptoms, but showed few substantial objective changes; 4 patients were not benefited at all. Several of these cases will be cited.*

The diet, according to Kempner, consists of 2,000 calories: about 20 Gm. of protein, 5 Gm. of fat, 460 Gm. of carbohydrates, 0.2 Gm. of sodium and 0.15 Gm. of chloride. Patients with marked hypochloremia, or with symptoms of salt deprivation, are given extra sodium chloride in small amounts, or 1 cc. dilute hydrochloric acid three times a day. The fluid intake usually is limited to 700 to 1,000 cc. of fruit juices per day (no water). Most patients consume 6½ to 10 ounces of rice daily (700 to 1,050 calories) and the additional calories are supplied by the use of sugar and fresh or preserved fruits. Any fruit, fresh or frozen, may be eaten with the exception of nuts, dates, the avocado, and any dried or canned fruit or fruit derivative to which substances other than sugar have been added. *No salt is permitted.* All fruit juices are allowed (no tomato juice or vegetable juice). The rice may be boiled or steamed in plain water or fruit juices, without salt. A short discussion with the hospital dietitian on the different methods of preparing rice and combining it with different fruits has been of great help to many of these patients.

In my series of cases, the strict rice diet, consisting of only rice, fruit, and fruit juices, was used for periods of three to twelve weeks. It was modified only when objective improvement in the urine, blood chemistry, electrocardiograms, eyegrounds, heart size and blood pressure readings was noted. Modification of the diet consisted of adding nonleguminous vegetables or small amounts of potatoes, lean beef, chicken, fish or eggs. (Each of my patients, when possible, had a personal conference with Miss Emilie Yagel, former Charleston General Hospital dietitian.)

It should be stressed that in cases of severe retinal, kidney, or cardiac disease, it is best not to modify the diet any sooner than is absolutely necessary, and when the modification is made, the patient should be watched closely for any signs of retrogression. One of the first questions posed by patients and physicians alike concerns the length of time the patient must stick to the diet, and the question probably can be answered best by stating that in critical cases the diet in a strict and, later, modified form may have to be continued indefinitely.

Several patients of mine who have been on the diet for more than a year have to my knowledge broken down several times, with undesirable results. After they have had their fling, so to speak, and their subjective symptoms have returned, one does not have too much difficulty in getting them back on the routine. It is my impression that most satisfactory results are obtained in patients in whom there is marked secondary kidney involvement as evidenced by an output of less than 25 per cent on the 15 minute phenolsulphonphthalein test, or a low fixed specific gravity, using the Fishberg concentration test, nonprotein nitrogen above 40 milligrams, or red blood cells or granular casts in the urine. It is not absolutely necessary, if adequate laboratory facilities are not available, to do protein, cholesterol and serum chloride studies after the initial work-up. Although most of the blood chemistry determinations suggested by Kempner were done on many of my patients at the laboratory of the Charleston General Hospital, sufficient alterations were not observed to warrant their continued routine use. A urine chloride determination is done routinely in my office on all of these patients. The urine chlorides should be kept at 100 mg. per 1,000 cubic centimeters,[7] and the test[8] can be run by the average laboratory technician in a period of ten minutes. If facilities are not available, and the patient complains of muscle cramps, anorexia, or marked nervousness due to hypochloremia, dilute hydrochloric acid 1 cc. should be given three times a day.

My patients have been observed from four to twenty-three months. The diet, when completely modified, has not been objectionable to those patients who have enjoyed marked relief from fatigue, tinnitus, headache, dyspnea and impending blindness. Only a few, i. e., those who did not eat enough rice in the beginning of the treatment to meet their caloric requirements, lost an appreciable amount of weight. However, the weight loss was desirable since many of these individuals were obese.

The arguments against the diet, that it causes depletion of plasma protein, hemoglobin, red

*Since this paper was begun, eight cases have been added to the original 18 with essentially the same results.

blood cells, and serious alterations in blood chemistry, are not substantiated by clinical experience. Kempner's original work was done on hospitalized patients and, while in starvation hemoglobin and plasma protein concentrations decrease, he found that in rice diet patients the hemoglobin and plasma protein concentrations are maintained at normal level. Moreover, the high blood cholesterol in many of these patients is reduced to normal during the course of the treatment; in Kempner's series of cases there was a decrease in serum cholesterol in 89 per cent of 82 patients after an average of ninety-one days on a strict or modified rice diet. Considering the adverse effects of hypercholesteremia on coronary disease and vascular retinopathy, it is highly desirable to reduce an elevated blood cholesteral. Vascular retinopathy is one of the morbid changes of hypertension which in the past has responded poorly to any mode of therapy. Kempner reports that of 33 patients with advanced vascular retinopathy, papilledema, hemorrhages, or exudates, who followed the diet for at least eight weeks, the retinopathy of one became worse; in 11 patients the retinopathy came to a standstill and the papilledema, hemorrhages and exudates partially cleared up; in 21, the retinopathy either disappeared to a considerable extent or cleared up completely under the rice regimen. Color photographs in the original reprint of the Kempner

TABLE I

	1947			1948				
	Nov. 3 to Nov. 10 (in hosp.)	Nov. 19	Nov. 30 to Dec. 3 (in hosp.)	Dec. 18	Jan. 2	Jan. 15 to Jan. 19 (in hosp.)	Feb. 13	Aug. 8
B. P. (mm. Hg.)	260/140	162/90	130/70	140/80	136/78	140/70	130/70	142/80
Hemoglobin (% of 15.5 Gm.)	78	80	90	80	82	76	62	70
RBC (per cu. mm.)	4,1	4,2	4,4	4,4	4,4	4,6	3,7	4,0
WBC	6,300	6,800	7,200	7,000	6,200	4,400		
NPN	40			15				
Urea		30						
Total protein	5.3	6.64	5.8			5.4		
Albumin	3.0	3.72				3.7		
Globulin	2.3	2.92				1.7		
Chlorides (mg.-serum)	468	439	540	573				
Cholesterol (165-200 mg.)	306		154					
Urinary findings:								
albumin	4+	2+	1+	1+		1+		
hyalin cast	Occ.	Occ.						
rbc	Occ.							
wbc	5	5						
PSP (% excre. 15 min.)	14.8							27
Papilledema	4		1 diop.*	2	**	1		
Retinal hemorrhages & exudates	4+			2+		1+		
T wave, Lead I	Invert.		diophasic			upright		
Gothlin index	58		20	34		12		
Diet	strict rice	same	modified with vegetables	some	modified with 1 egg 3X weekly & 1 portion meat, fish or chicken 3X weekly	modified with meat fish, eggs & vegetables	some	some
Medication	rutin 20 mg. 3X day & Unicap 1 O. D. Mercupurin 2X weekly	some	same	some	same	same	some plus feosol grs. 5 3X day	

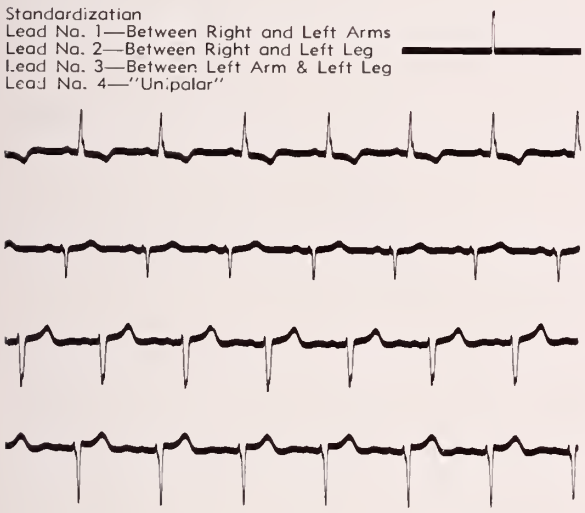
*"Dec. 2, 1947: The discs are definitely flatter, that is, less than 1 diopter of edema. The arteries are certainly narrowed. Marked absorption of hemorrhages has taken place although in some areas the hemorrhages have been replaced with hard, white spots. These do not seem to be typical of diabetes, however. This entire picture, I believe, is indicative of improvement in the hypertension. C. F. B."

**"Jan. 2, 1948: Ophthalmoscopically, there has been quite a marked change from the previous examination Nov. 1, 1947. The optic discs are flat with sharp edges, but still retain a yellowish cast. Most of the flame-shaped hemorrhages have absorbed as well as most of the fluffy white exudates. A number of small round hemorrhages are still present, and in the central fundus large masses of hard, marble-white exudates are present. The veins are not as full as on the previous examination, and the arteries only moderately attenuated. The left fundus contained more hemorrhages and exudates than the right. At the present time I believe the fundus picture is more a diabetic retinosis than a hypertensive retinopathy. C. F. B."

article vividly portray the marked improvement.

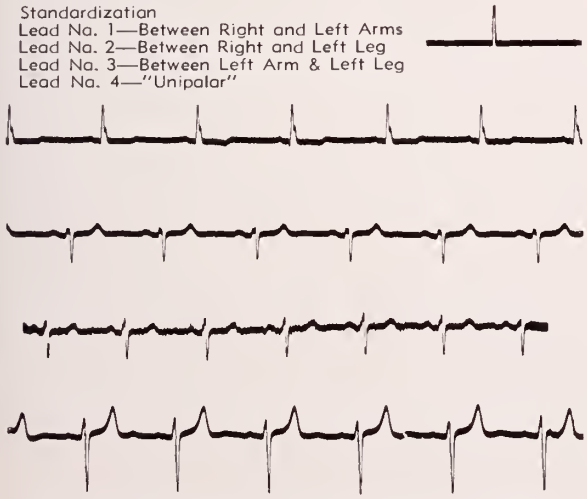
CASE REPORTS

Case 1.—Mrs. E. S., white, female, age 59, consulted Doctor Breisacher, ophthalmologist, Nov. 1, 1947, complaining of blurred and diminished vision of four days' duration. The patient's past history was completely negative as far as any type of kidney disease was concerned. She was hospitalized the following day and Doctor



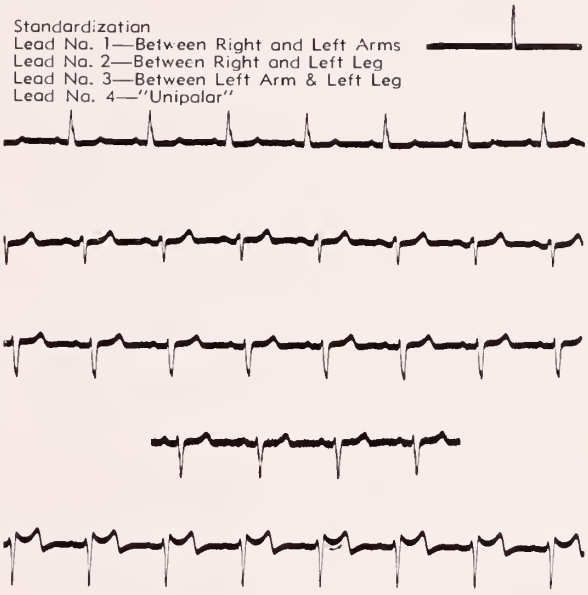
Case 1.—Mrs. E. S. EKG No. 1. Nov. 4, 1947. EKG made when patient was first seen. Blood pressure 258/132 on right, 230/120 on left. The salient features are inverted T_1, left ventricular strain and left axis deviation. Diagnosis: hypertensive arteriosclerotic heart disease.

Breisacher made the following note: "Examination revealed vision with correction O. D. 20/100; O. S., counts fingers at 18 inches. Both fundi show 3 diopters of choking of disc. Veins overflow and arteries only moderate size. Both fundi peppered with a great number of large and small hemorrhages, both flame-shaped and round.

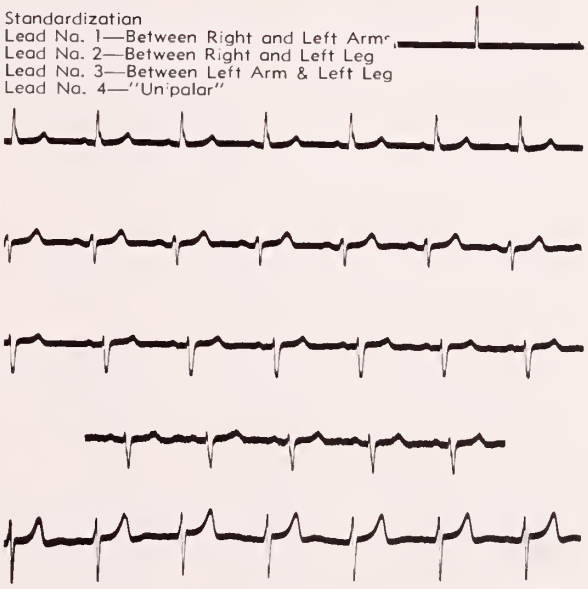


Case 1.—EKG No. 2. Dec. 3, 1947, approximately 1 month after beginning rice diet. T_1 diphasic with left axis deviation still present. Blood pressure on this day 132/800.

There are also many large areas of white, fluffy exudate in each fundus. Impression: grade 4 hypertensive retinopathy, except that the edema of the discs is sharply demarcated from peripapillary retina. Papilledema seems plerocephalic."

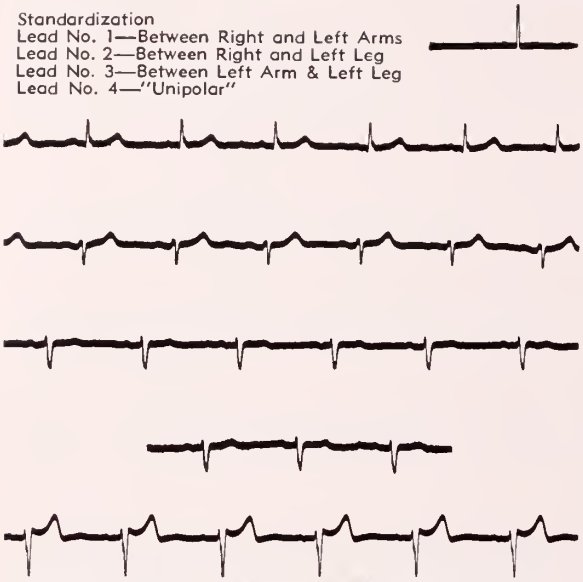


Case 1.—EKG No. 3. Jan. 16, 1948. Blood pressure on this day 140/70. T_1 upright. The signs of ventricular strain in lead I have practically disappeared. Lead IV shows an abnormal T wave but not of the coronary type.



Case 1.—EKG No. 4. Feb. 13, 1948. Blood pressure 138/82. EKG is well within normal limits except for left axis deviation.

The patient's glucose tolerance curve on Nov. 2, 1947 was: fasting, 145; one-half hour, 310; 1 hour, 330; 2 hours, 340; 3 hours, 360. The test was repeated Dec. 1: fasting, 140; one-half hour, 230; 2 hours, 330; 3 hours, 290. Although there was never any glycosuria she was placed on



Case 1.—EKG No. 5. Aug. 17, 1948. Blood pressure on this day 142/84. Cardiogram is essentially normal except for left axis deviation.

protamine zinc insulin 10 units (Dec. 2, 1947), since Doctor Breisacher felt that her eyeground picture, in part, was diabetic in nature. It must be emphasized that while only the objective results in this case can be noted in table 1, the subjective improvement in the patient's vision and general well being was even more striking.

This unquestionably is a case of Cushing's disease since after four months of protamine zinc insulin (22 U.) therapy the glucose tolerance curve was unaltered. The last curve on May 5 was: fasting, 70; 1 hour, 150; 2 hours, 300; 3 hours, 245. In addition to the insulin-resistant diabetes, she has kyphosis of upper spine, hypertrichosis of the face and neck, osteoporosis on x-ray examination, marked muscular weakness, girdle obesity, bruises very easily, and her original complaint of hypertension. Studies to date have revealed no pituitary, adrenal or ovarian tumor. We might postulate, therefore, that this type of Cushing syndrome is due to hyperplasia of the adrenal gland with resulting hyperadrenocorticism. Albright believes that the hypergluconeogenesis resulting from this hyperplasia of the adrenal gland is a primary factor in producing the symptoms of this disease.

Case 2.—Mrs. H. F. R., white, age 59, was first seen Dec. 1, 1947, complaining of dizziness, 'fullness' in the head, and ringing in the ears. She had had a cerebral hemorrhage in 1938 and was known to have had hypertension for at least

TABLE II

	1947 Dec. 1	Dec. 19	1948 Jan. 9	Jan. 21	Feb. 3	March 2	Aug. 28
B. P. (mm. Hg.)	240/110	138/80	126/76	138/70	148/80	144/80	142/82
Hemoglobin (% of 15.5 Gm.)	102	79	73	78	72	78	82
RBC (per cu. mm.)	4,2	4,1	3,6	4,1	3,8	3,8	4,5
WBC	5,200	6,200	5,300	4,400	------	------	------
NPN	------	------	------	------	------	------	------
Urea	15	------	------	------	------	------	------
Total protein	7.3	------	------	6.4	------	7.1	7.6
Albumin	3.2	------	------	3.7	------	------	------
Globulin	4.6	------	------	2.7	------	------	------
Chlorides (mg. per 100 cc. serum)	579	527	556	591	------	------	------
Cholesterol (165-200 mg.)	306	209	------	------	------	190	------
Urinary findings							
albumin	1	------	------	------	------	neg.	------
hyalin cast	many	------	------	------	------	------	------
PSP (% excre. 15 min.)	15	------	20	------	------	25	------
Papilledema	------	------	------	------	------	------	------
Retinal hemorrhages & exudates	------	------	------	------	------	------	------
T wave, Lead I	upright	------	------	------	------	------	------
Gothlin index	26	16	normal	normal	normal	normal	
Diet	strict rice	same modified with vegetables	mod. 3 eggs weekly, & lean meat 3X weekly	same	same	same	
Medication	Rutin 20 mg. t.i.d. Nicotinic acid 20 mg. t.i.d. Unicap 1 O. D. Mercupurin occasionally	same	same plus feosol gr. 5 t.i.d.	same (rutin stopped)	same	same	

twenty years. Her blood pressure at age 39, when she had been hospitalized for eclampsia, was 280 systolic. Her family history was significant in that one sister had undergone sympathectomy at age 47 for the relief of hypertension, the results of which had not been satisfactory.

This patient obtained a dramatic subjective improvement in her original symptoms (table 2).

In cases in which the urine chloride excretion is above 100 mg. per 1,000 cubic centimeters of urine, it has been my practice to give mercupurin 1 cc. intravenously. As one observer[9] expresses it: ". . . One dose of a mercurial diuretic may rob an edema-free patient of 4,000 mg. of sodium, and in edema the total loss in a week can more than make up for the difference in salt obtained from a rice diet and from one with a wider choice of unsalted foods, or it may compensate for the sodium taken in by the patient who occasionally dines out." It may be noted that the patients in cases 1 and 2, both of whom had marked secondary renal involvement, responded very dramatically to the rice diet.

Case 3.—J. S., white, male, age 67, was first seen Sept. 23, 1947, complaining of dizziness, ringing in the ears and dyspnea on exertion. He was known to have had hypertension for at least thirty years. His family history was contributory in that his mother and father had died of a cerebral hemorrhage at ages 55 and 70 respectively, in both instances the hemorrhage being secondary to hypertension. One sister had died at age 58 of coronary disease. One brother, living, age 60, has coronary disease.

The blood pressure was 240 systolic and 130 diastolic. There was retinal sclerosis grade 1. Orthodiagraphic study showed the heart to be enlarged, with a markedly prominent left ventricle and aortic knob. The electrocardiogram showed a flat T_1, the Gothlin index was 38, phenolsulphonphthalein was 15 per cent at the end of fifteen minutes. Specific gravity (Fishberg concentration test) was 1.012, 1.012, and 1.013. Microscopically, the urine showed an occasional white blood cell, 1 to 3 red blood cells, with an occasional granular cast.

The patient was put on a rice, fruit and fruit juice diet Sept. 23, 1947, which was continued until Nov. 13 when small amounts of vegetables, eggs and meat were added. The medication was rutin 20 mg. thrice daily, and unicaps 1 daily. Some of the blood pressure readings were: Oct. 9, 160/98; Nov. 13, 158/88; Dec. 5, 156/88. The blood chemistry and blood counts have not shown any significant changes. On Dec. 30, 1947, the blood pressure was 152/90 and, since there was objective as well as marked subjective improvement, a low (200 mg.) sodium diet was introduced, fourteen weeks after the beginning of the rice regimen. On re-examination Jan. 13, 1948, the blood pressure was 140/88, hemoglobin 92 per cent, red blood cells 4,400,000, urine chlorides 300 milligrams. Because of the elevation in the urine chlorides mercupurin 1 cc. was given intravenously. It is my belief that many patients of this type can be started on the rice diet and, after objective and subjective improvement are shown, the 200 mg. low sodium diet can be substituted. This diet will be discussed in detail in Part III.

Case 4.—Mrs. H. C., white, age 45, was first seen Oct. 31, 1947, complaining of marked symptoms of hypertensive encephalopathy, nocturia, and slight difficulty in speech due to a cerebral hemorrhage which had occurred about 2 months previously (Aug. 7).

The patient's past history was particularly significant in that she had been hospitalized in 1936 for (a) preeclampsia, (b) chronic nephritis, and (c) hypertension (235 systolic and 140 diastolic, nonprotein nitrogen 43.2). A cesarian section was done and the fallopian tubes were ligated.

When I examined her she weighed 136 pounds; her blood pressure was 240 systolic and 140 diastolic. The fundi were grade 2 with a few hemorrhagic areas in the left fundus. The Gothlin index was 20. The phenolsulphonphthalein test was 10 per cent at the end of fifteen minutes. The total protein was 7.2 per cent; hemoglobin was 82 per cent; red blood cells were 4,200,000.

The patient was placed on a strict rice diet, with rutin 20 mg. three times a day, and 1 unicap daily.

When re-examined Nov. 24 (23 days after beginning the diet), the blood pressure was 138 systolic and 88 diastolic. She was feeling very much improved, with complete loss of dizziness, headache and the feeling of fullness in the ears.

On Jan. 5, 1948, the blood pressure was 122 systolic and 74 diastolic. The phenolsulphonphthalein test was 25 per cent at the end of fifteen minutes. The hemoglobin was 98 per cent, the red blood cells 5,700,000. The diet was now liberalized by the addition of nonleguminous vegetables.

On Feb. 3 the blood pressure was 140 systolic and 80 diastolic. The diet was further modified with 1 egg four times weekly plus 5 ounces of meat or fish or chicken weekly. She entered the hospital Feb. 9 for surgery by Dr. Hugh Bailey.

The blood pressure before surgery was 140 systolic and 102 diastolic, on the day following 138 systolic and 88 diastolic, and on her last office visit (Aug. 4, 1948) 136 systolic and 84 diastolic.

Case 5.—Mr. H. A., white, age 47, salesman, was first seen July 18, 1947. Approximately two months earlier (May 22) he had suffered a cerebral hemorrhage since which occurrence he had complained of severe occipital headache, paroxysmal dyspnea and dizziness. The blood pressure was 240 systolic and 145 diastolic.

Eye examination as reported by Doctor Chandler was: ". . . paralysis of the right medial rectus muscle with diplopia due to involvement of the third nerve secondary to a cerebral hemorrhage." The patient recently had returned from Cleveland Clinic and had been on thiocyanate therapy without beneficial results. He had been advised to return for sympathectomy.

At the time of my examination his Gothlin index was elevated and for this reason he was placed on rutin as well as the strict rice diet and was kept on this regimen until August 15 when the diet was liberalized with vegetables. The blood pressure at this time was 162 systolic and 100 diastolic. On Sept. 15 the blood pressure was 158 systolic and 98 diastolic. The electrocardiogram, which previously had shown a diaphasic T_1, now showed an upright T_1, and the patient was completely relieved of any subjective symptoms. The diet later was further modified with eggs, meat, chicken and fish. At the last examination, March 5, the blood pressure was 150 systolic and 96 diastolic. He was still on the modified rice diet, and reported that he was working every day at his usual occupation which was a strenuous one. The urinary chlorides have been kept below 100 mg. per 1,000 cubic centimeters by means of the aforementioned diet plus the injection of mercupurin 1 cc. every one or two weeks as necessary.

Case 6.—Mr. J. W., white, male, age 56, was first seen Oct. 29, 1947, complaining of occipital headaches, marked dizziness and nocturia. In a report from the Cleveland Clinic dated Aug. 5, 1947, it was noted that this patient's blood pressure was 218 systolic and 144 diastolic, with a markedly reduced urea clearance test, and that these were the only significant findings.

On examination at my office Oct. 29, 1947, the blood pressure was 230 systolic and 138 diastolic, with 15 per cent phenolsulphonphthalein excretion at the end of fifteen minutes. The results of the Fishberg concentration test were 1.016, 1.014, and 1.018.

The patient was put on a strict rice diet with nicotinic acid 20 mg. three times a day after meals, and on Nov. 6 the blood pressure was 164 systolic and 118 diastolic, with partial relief of vertigo and headaches.

Approximately five weeks after beginning the rice diet (Dec. 5) the patient's blood pressure was 150 systolic and 88 diastolic. He stated that he felt much improved. The phenolsulphonphthalein test at that time indicated some improvement. The diet was then modified by the addition of vegetables.

Case 7.—H. B., age 55, white, male, was first seen Dec. 2, 1947, at which time he complained of diminished vision (particularly in the left eye) of one month's duration, dyspnea on exertion and dizziness on stooping over. This patient was known to have had hypertension for approximately eleven years, and had been on protamine zinc insulin 15 units for the past two years for the control of diabetes. The blood pressure was 245 systolic and 130 diastolic. Doctor Breisacher reported Dec. 5, 1947, as follows: "In the right eye the media is clear; the disc is of good color, but there is one small spindle-shaped hemorrhage on the disc surface; the disc edges are somewhat fuzzy in the upper portion; the arteries are severely narrowed, quite spastic in some areas, and completely obliterate the veins at the crossings; many flame-shaped hemorrhages of various sizes are scattered throughout the fundus; several large areas of white exudate are present, adjacent to some of the hemorrhagic areas. There are no hemorrhages or exudates in the macula; the veins are also quite narrow. In the left eye the fundus is much the same as in the right except that the disc edges are more blurred and there is one large hemorrhage in the macula. It is my opinion that the condition is hypertensive retinopathy grade 3, and that the fundus picture is not diabetic because of the absence of small, round hemorrhages, and small, hard, white spots."

The phenolsulphonphthalein test was 15 per cent at the end of fifteen minutes. The Gothlin index was 54. The patient was put on rutin 20 mg. three times a day, plus a strict rice diet; the diabetes was controlled by the use of 20 units of protamine zinc insulin daily as prescribed by his family physician.

The patient's blood pressure Dec. 26, after a drive of approximately 90 miles, was 170 systolic and 90 diastolic. When re-checked the afternoon of the same day it was 158 systolic and 88 diastolic. On Jan. 9, 1948, the blood pressure was 162 systolic and 98 diastolic, with marked improvement in vision and a feeling of general well

being. The diet was modified by the addition of nonleguminous vegetables.

The patient was seen again Jan. 30 when his blood pressure was 158 systolic and 96 diastolic. The following report was rendered by Doctor Breisacher: ". . . Mr. B's. vision with his glasses was O. D. 20/20 + 3, O. S. 20/20 – 2. Mr. B. himself believes that his vision is much improved. The ophthalmoscopic picture was as follows: O. D., the disc was of good color and the edges are now sharp. The arteries are much fuller generally, but there are still some areas of spasm. About half of the large hemorrhages previously noted have absorbed, or are absorbing, and most of the large areas of exudate have also absorbed. There are still a great number of hemorrhages present, none of which seems to be fresh, and most are of the small, round type. The left fundus was much as the right except that the large hemorrhage in the macula has completely absorbed. There is now in the macula, and temporal to it, a group of small, sharp, hard, white exudates, some of which are confluent. The hemorrhages are more numerous in the left fundus than in the right. I think this picture now represents marked improvement in the hypertensive fundus changes. The presence of small, round hemorrhages and the hard, white exudates in the left fundus seems to be indicative of diabetic retinopathy rather than hypertensive change."

At the time of the patient's last visit, Feb. 13, the blood pressure was 160 systolic and 98 diastolic, and he stated that he was feeling considerably improved. Because of the fact that he was leaving for Florida for two months he was switched to the low sodium diet. The change was made a bit earlier than is customary but it was considered expedient since it would be practically impossible for the patient to follow the rice diet while residing at a hotel.

Case 8.—Mrs. I. C., age 72, white, was first seen Feb. 12, 1947, complaining of diminished vision, nocturia and dizziness. A diagnosis of hypertension had been made fifteen years previously. The blood pressure at the time of my first examination was 240 systolic and 110 diastolic; the weight was 130 pounds. The Gothlin index was over 38. Doctor Chandler, ophthalmologist, reported "retinal hemorrhage in the right field of the right fundus, with marked narrowing of the arteries; scattered hemorrhages with a star around the macula of the left eye. Grade 4 arteriosclerosis." A complete report of Doctor Chandler's findings for the entire year follows.

"I first saw her in January of 1947. At that time her visual acuity, corrected, was 20/30ths in the right eye and ability to count fingers at 1 foot in the left. Two small hemorrhages were seen in the retina of the right eye, up and temporally. Numerous small hemorrhages were scattered over throughout the left retina, especially in the peripapillary area. There was some pallor of the left disc, and retinal edema. White exudates were present around the macula in a beginning star formation. Attenuation of the retinal arteries was noted. Diagnosis of grade 4 retinal arteriosclerosis was made. She was seen again in May of 1947 at which time no hemorrhages were seen in the right eye and there were fewer in the left than originally. The edema had subsided remarkably and the star formation was less developed. She was again seen in December of 1947. At that time no hemorrhages or exudates were seen."

Due to this patient's age and her reticence in going on any strict regimen she was treated at first simply with rutin 20 mg. three times a day plus phenobarbital grains ¼ three times a day before meals and at bedtime for one month, at the end of which period the blood pressure was 220 systolic and 108 diastolic, and the subjective symptoms were unaltered.

On March 20, 1947, she began the strict rice diet. On April 25 her weight was 126 pounds, the blood pressure 160 systolic and 80 diastolic. Re-examination of the eyegrounds May 9 showed definite improvement as will be noted in Doctor Chandler's report. On May 10 the diet was modified by the addition of nonleguminous vegetables, one potato, and one egg three times a week. The diet was further modified June 19 by the addition of lean meat, fish, and chicken. From June 19, 1947 until the time of her last visit, Sept. 9, 1948, this patient was seen once a month, and the blood pressure had varied from 120 to 140 systolic, and 78 to 88 diastolic. However, of far more importance is the marked relief from her original symptoms and the cessation of decrease in visual acuity which this elderly woman has experienced.

Case 9.—Mrs. W. J., white, age 58, was first seen March 22, 1947, complaining of headache, increased difficulty in reading, and dizziness. She had been examined in June, 1945, at the Mayo Clinic with the following summary: ". . . moderately severe hypertension associated with hypertensive narrowing of the retinal arterioles with spastic constrictions and sclerosis." She was put on potassium thiocyanate therapy, also phenobarbital at the Clinic since she was not con-

sidered a good surgical risk. Her electrocardiogram showed slurring of the QRS in lead II; notching of the QRS in lead III; left axis deviation; diphasic P_3; inverted T_1; low amplitude in T_2.

Examination in my office March 22, 1947, revealed the blood pressure to be 220 systolic and 130 diastolic, the Gothlin index 36, the electrocardiogram basically the same as reported in 1945 by the Mayo Clinic.

Due to the fact that this patient had apparently experienced practically no relief from the thiocyanate therapy, she was immediately put on the rice diet and was kept on it strictly for six weeks. The blood pressure at the end of that period was 150 systolic and 86 diastolic. The diet then was liberalized in the usual manner. From July 12, 1947 to Sept. 9, 1948 (last examination date) the blood pressure remained between 140 and 160 systolic, 82 and 98 diastolic. Her last electrocardiogram, Jan. 9, 1948, showed marked improvement, with an upright T_1, and T_2 of higher voltage. This patient had also an overactive pituitary gland as shown by a positive bio-assay for antidiuretic hormone and gonadotropic hormone, and was treated with pitressin tannate in oil and stilbesterol, as outlined by Griffith.[10]

Case 10.—Mrs. L. C., white, age 57, was first seen Sept. 10, 1947. She had no significant complaints but was known to have had hypertension for about twelve years, and had experienced occasional headaches and precordial distress.

The blood pressure was 220 systolic and 118 diastolic; there was considerable increase in the size of the heart. The eyegrounds showed retinosclerosis grade 1 but no hemorrhages or exudates. The Gothlin index was 25. Phenolsulphonphthalein was 20 per cent at the end of fifteen minutes. Since the patient was not too uncomfortable, she refused any strict regimen and was simply put on rutin 20 mg. three times a day for a period of approximately three months.

On Dec. 23 she complained of some precordial distress on exertion. Electrocardiograms on two occasions were negative. The blood pressure was 202 systolic and 110 diastolic. The Gothlin index was 8. Laboratory studies at this time showed blood cholesterol 605, albumin (2 plus), with a number of hyalin and granular casts in the urine. Since it was felt that it would be best to reduce the high blood cholesterol in view of her cardiac complaints, the rice diet was suggested and the patient consented to try it.

On Jan. 8, 1948, the blood pressure was 170 systolic and 98 diastolic; on Jan. 23, it was 160 systolic and 90 diastolic; a re-check of the blood cholesterol on the latter date showed it to be 349. On Jan. 30, the blood pressure was 150 systolic and 90 diastolic and, since the patient had obtained marked relief from her precordial distress, she was placed on a low sodium diet. On Feb. 19, the blood pressure was 154 systolic and 92 diastolic, the blood cholesterol 383.

In my basic workup of hypertension cases a specimen of the patient's serum is sent to The Laboratory for the Study of Hypertension at the University of Pennsylvania. The tests are for the purpose of determining whether the hypertension may be secondary to an overactive pituitary gland. If the test shows a positive result the patient should be treated with injections of pitressin tannate in oil, or pituitary irradiation. This phase of hypertension will be discussed more fully in part III.

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DIAGNOSIS OF RHEUMATIC FEVER

The problem of rheumatic fever is one of the most important in the school-age child. Every physician who sees children in his practice must be familiar with the problem as he must assume the greatest responsibility in the solution of the problem. It is only the physician who is equipped to make the diagnosis, as this is made entirely on clinical grounds. Proper management demands an understanding of the significance of rest, diet, symptomatic treatment and the emotional and educational factors. The patient should be under surveillance for a period of years. The control of recrudescences is a distinct advancement in regard to conquering the problem.—Arild E. Hansen, M. D., in Texas Reports on Biology and Medicine.

MEDICAL POTPOURRI*

By L. RUSH LAMBERT, M. D., F.A.C.P.
Fairmont, W. Va.

This is such a swiftly changing world that before one's thoughts can be put in writing they are out-dated. When Doctor Bess asked me to deliver the oration on medicine, I felt flattered and accepted before I had time to think of the great responsibility thrust upon me. My first idea was to discuss some discrete clinical topic but the more I thought of it, the more I was reminded that I had nothing worth while to add to the edification of this audience on any particular clinical entity. Therefore, I will speak in a general way about some of the problems of medicine.

My subject matter may be considered in the light of an editorial. One of the functions of medical editors is to share with their readers information which has interested them and which apparently has given a final answer to some puzzling question, or which has knocked the props from under some long-established theory. I do not expect to perform this function, but I do want to bring to your attention some of the problems of medicine as I see them, with the hope that it will be a slight stimulus to all of us to try to solve these problems for the betterment of civilization.

As I have already intimated, much that I have to say has been in the minds of others and has been expressed before. Dr. Allan Gregg, of the Rockefeller Foundation, had already expressed some of my thoughts at the recent meeting of the American College of Physicians in San Francisco. As *Time* so aptly reported of this meeting, "The ceremonial speeches at medical conventions are usually sugared pills of platitudes. . . . Dr. Allan Gregg stuck a probe in the powerful Specialty Boards. 'The inbred backward-looking boards' he said, 'give examinations that try to find out whether a candidate knows what the examiners know, not what the candidate himself knows. They stifle medical progress by 'withholding approval of the new by insistent emphasis on expert knowledge of the old'; they become 'partners of static and reactionary, albeit powerful and respectable, inertia of consequence'. Doctor Gregg's suggestion was to pick specialists by their competence in practice." Well, that is easier said than done. You will recall that Dr. Hugh Morgan, at the recent session of the American College of Physicians, reminded his listeners that physicians are losing the public's respect by commercialization, a tendency that I have noted during my twenty odd years of practice. To my mind, the only solution to this problem is in the selection of our students of medicine, and in their training and education. There is no infallible rule to follow in the selection of medical students. So far as I am able to learn, students are selected on the basis of scholastic attainment, and in many instances on the impression the prospective medical student makes on the entrance or credential committee of the medical college after a personal interview. One can readily see the inadequacy of both of these methods of selection. I have heard that the dean of one of our medical schools objected to accepting the sons of doctors as medical students, and those with a physical handicap I do not know the rationale of such thinking. It is my feeling that the training of the physician should be started as early as possible. It is a condition of life, that the experiences of parents shall be transmitted to their children; so, in the selection of medical students, it might be well to study the ancestors of the prospective medical student and, to paraphrase Oliver Wendell Holmes relative to longevity, select the students before they are born.

Relative to the loss of respect of the public for the physician, I want to emphasize that the members of the medical profession have brought this condition about by their own conduct. Again, it is a matter of education and the selection of students for the practice of medicine as well as guidance through the early years of practice by men who will not betray the ideals of their profession and corrupt the medical system by their greed, intrigue and professional jealousies. Medical students, harassed by financial worries and backstairs politics of hospital staffs during internships and residencies, early lose faith in the ideals of medicine. We need more of the men in medicine who can inspire the younger physicians to hold fast to their earlier convictions. I sometimes wonder if the breed is dying out. What can one expect of the physician trained under our present system of education in which the teaching is geared to the lowest scholastic level? The fault seems to lie at the doorstep of our secondary schools where we run into a long chain of factors affecting the quality of the teaching—insecurity, incompetence, temperamental unfitness and many others. We will never be able to raise the quality of our teaching until we raise the standards of our teachers. This gets us into the economic problem and so on, ad infinitum.

The training of the physician does not end with his graduation from medical school, or upon

*Oration in medicine presented before the 81st annual meeting of the West Virginia State Medical Association, at Huntington, May 11, 1948.

the completion of his internship, residency, and license to practice medicine. He is, or should be, a student throughout his active life. Specialty boards have been set up with certain standards to be maintained by their members. There is no measuring stick by which one can measure the qualifications for the practice of medicine. These boards can at best measure or determine the professional qualifications (and I use that term with reservation) of the physician. The specialty board in the case of a surgeon is not going to determine whether or not the surgeon uses good surgical judgment from the standpoint of the health of the patient, rather than the patient's purse, nor will the doctor who has been certified by a specialty board be better fitted to practice the art of medicine which is of equal importance to the science of medicine. In fact, I feel that medicine in its broadest interpretation is an art and a science. Please do not misunderstand me, I am not opposed to specialty boards and I feel that one of the most important landmarks in the history of the American College of Physicians and the American College of Surgeons is a requirement of certification by the specialty board for fellowship in these organizations. My fear is that the certification is tantamount to election to fellowship. Real progress is necessarily slow and, in my opinion, much is to be accomplished.

Incentives for being certified by a specialty board are noticeable in recent developments. During World War II certification by a specialty board carried weight to some extent in the granting of commissions in the medical corps of the armed forces. It is also noted that the Veterans Administration pays an additional stipend to those physicians who are certified. It is noted in the classified advertisements in the professional journals that physicians who are board members, or who are eligible for certification, are wanted to fill positions in clinics and schools. I wish to point out that the layman does not know the physician who is certified from the one who is not. This all resolves itself around the education of the layman and the ability of the physician to sell himself to the people who are to become his patients. How does the average patient select his physician? I shall not bore you with the answer for I think it is known.

The practice of medicine has become more detailed, more technical, more specialized and, as more knowledge has been accumulated concerning various organs of the body, the diagnosis and treatment of diseases of these organs have been placed in the hands of physicians who have become versed in the specific knowledge relating to these organs. In other words, doctors have become more specialized and, as this has taken place, it has become more difficult for the specialist to regard the patient as a whole person. In this age of specialization the patient, as a person functioning in his own environment, beset by troubles, has been overlooked.

With this trend toward specialization, clinics have sprung up over the land. In some of these clinics the patient is examined piece by piece with the hope that at the end of the line the diagnosis will be found and appropriate treatment instituted. Even though the patient has obtained the best in the way of specialists to diagnose and treat diseases of his various organs, when he reaches the end of the line, his condition is just as confusing from a diagnostic standpoint as when he started down the line. This problem exists more or less in the private office as well as in the clinic, or anywhere that medicine is practiced. It seems that in this commercialized world medicine has followed in the footsteps of big business and formed assembly lines in order to speed up production. In so doing there has been a loss of perspective on the patient as a person. More and more specialization is bound to occur and I wish to make a plea for better orientation of the medical student around the patient, the individual, what he is, how he functions, how he feels and how he gets along in his environment. This orientation should take place as the student travels through medical school, in order that he will better understand the whole individual and what he himself is trying to do as a physician.

We hear a great deal today about psychosomatic medicine. In fact, it is becoming another specialty. Articles on the subject are appearing in both lay and medical periodicals. The term was coined by psychiatrists but psychosomatic medicine does not belong in the domain of psychiatry. Psychosomatic study should be just as much a part of the general examination as the routine blood study or urinalysis. All of us are aware, or should be, that emotional disturbances play an important role in the everyday practice of medicine. Disturbances of the psyche often are the crux of the diagnostic problems confronting us. With the complexities of modern civilization, tension and pressure to attain our goals, emotional problems in our practice have taken on gargantuan aspects. Therefore, the general practitioner should be trained to take care of these problems. He is the first line of medical defense and assumes the important job of keeping the functioning patient functioning

within his usual environment. The general practitioner and internist should be trained to recognize and treat the psychoneuroses and psychosomatic disorders, and those patients beyond the scope and training of the internist should be referred to the trained psychiatrist.

These are rapidly changing times and the tempo of life has quickened to the point where it is difficult for the physician to keep himself posted on the progress of medicine alone, and more difficult to practice medicine and find time for performing the duties of citizenship not to mention recreation. It has reached the point where many physicians depend on the so-called "throw away" medical journals and the drug detail men to keep them posted on the progress of medicine. We have become a nation of digest readers. We want to know what is good for this or that, without a clear understanding of the cause or pathology of the disease.

We have been astray in our education. We have been equally wrong in our science. Medicine is an Art founded upon observation of the complete patient, with experience alone as its guide. When medicine forsakes the patient, it becomes futile. When it leaves the bedside, it is lost. Medicine is a way of life and the prospective practitioner is the best judge of how far or how fast he can go. He knows his own capacity, and feels the bounds of his ambitions. He has an instinct of being a general practitioner in a small town, or a specialist. No student can learn a little of everything as we seem to be trying to do. We seem to have failed to develop an instinct for what is true, and failed to turn away from the false.

This holds true especially in scientific medical research, the ultimate purpose of which is to rid man of disease, prevent disease, and to relieve man of his discomforts when disease states are present. Scientific research is the guiding spirit of medicine; however, there seems to be a lack of rapport between research and clinical medicine. The lonely worker in the laboratory who deals with truth in the abstract is looked upon with respect and fear by the physician who practices at the bedside. Researches are necessarily slow and often delayed, or fail because of various factors. They are sometimes hurried, wasteful, and erroneous because of the many restrictions such as lack of adequate equipment to deal with certain problems, sufficient funds, intellectual latitude, personal vagary and social pressures.

"The scientific age has dawned and we recognize that the man himself is the master of his own soul." So wrote the late Sir James Jeans. The same thought has been expressed many times by physical scientists. It seems to be taken for granted that if a man can weigh the stars, split the uranium atom and cure disease that decimates populations, he can also shape his own social destiny. It is within the memory of some living men that bacteria as a cause of human disease was unknown to medical science. The years surrounding this new century saw the discovery and the development of practically all of the technics and methods which we now choose to call scientific medicine, and new avenues of vision were opened to physicians, and medicine suddenly had a more realistic view of causes and effects. With the discovery that bacteria was a cause of disease, hopes ran high that perhaps all diseases would be found to have a specific pathology and that the treatment of disease would become a scientific procedure—a specific antidote for a specific pathology. One stands in awe of the energy and industry of investigators searching for the pathologic changes taking place in disease.

Medical science through research has conquered most of the so-called acute infectious diseases. The success which has attended the discovery of the cause, prevention and treatment of infectious diseases now has turned our efforts towards the solution of the problem of the degenerative diseases, and great interest is being shown by the public and the physician in solving the problem of longevity. It is the universal fear of death, or the will to live as long as possible, that makes the medical profession possible. Life has always been held in precious esteem and neither the art nor the science of medicine has as yet achieved an understanding of life or of what to do to prolong it. As more knowledge accumulates, a society is formed to study a specific problem. We have formed national societies for the study of tuberculosis, cancer, infantile paralysis and heart disease. Recently, the American Geriatric Society and, more recently, the American Society for the Study of Arteriosclerosis have come into being.

Much has been written in both the lay and medical press about the increase in the span of life due to the achievements of medical science. Statistics to the contrary, the span of human life has not been lengthened, and there is no prospect that it soon will be. The average duration of life is all that has been altered and that has been accomplished by reducing infant mortality. If we interpret our statistics correctly, there is little in them to bring cheer to the man at forty who would like to buy an annuity and look forward

to gloating over the insurance company as a nonagenarian. From the beginning of civilization man has sought the fountain of perpetual youth. Ponce de Leon sought it in the New World. Steinach severed the vas deferens in an effort to rejuvenate old men. Why some individuals live longer than others is a biologic question and one of the most fundamental ones that medical science has to worry over. A great deal of research is being done on longevity. Researchers have gathered data on long lived and short lived individuals, the importance of inheritance has been emphasized, and the significance of genetic factors in determining individual differences in the length of life has been demonstrated. The inherited biologic constitution is not the sole determiner of the length of an individual's life. The general effect of public health and sanitary measures promotes conditions of living which determine the length of life, especially in the first decade. Progress in this type of research is laborious, expensive and slow and, I might add, controversial. One fact seems well established and that is that the majority of individuals who have lived long lives were of a placid temperament and not given to worry, so it is almost axiomatic that the rate of life, in a large measure, determines the duration of life.

The increase in the population of older people because of the decrease in infant mortality or, more precisely, increasing the average span of life, has resulted in a great sociologic problem, i.e., the burden on the public of the care of the aged who are chronically ill. There is no established program for their care as chronic invalids. Many are scattered throughout general hospitals and take up beds badly needed for acute cases. Improved facilities are needed for their care. In addition to the mounting medical problems in the care of the chronically ill, an equally serious social and economic problem has arisen: the employment of the aging worker. Some states are making a survey of these problems in attempting to find the solution. It behooves West Virginians to do something about it, also.

When we think of longevity our thoughts are particularly concerned with the biologic constitutional factors determining the duration of life. Now let us look at some of the environmental aspects of longevity. Since we cannot choose our parents there is not much we can do about the hereditary factors. We would like to know, however, just what one can do after birth to assure a ripe old age of, possibly, ninety years. There are some environmental factors that are thought to be concerned with longevity. Of all such factors, probably alcoholic beverages and tobacco have been the most widely discussed. Relative to alcohol, no valid generalization can be made that it always and everywhere shortens the life of its users. From the available statistics, it might be concluded that moderate drinking does not significantly shorten life when compared with total abstention. There is little need to discuss this further because these conclusions will be accepted by some and rejected by others, according to their sentiments and emotions.

Tobacco, which is another substance not necessary to the maintenance of life, probably is more widespread in its use than alcohol if we deduct the amounts of alcohol used innocently by white ribboners in their favorite prescriptions. For the purpose of this discussion we will confine our remarks to the tobacco smokers and leave out those unesthetic individuals who chew or "rub". As with alcohol, some definite conclusions which are valid to men of science may be drawn; however, the subject will always be controversial. I believe that there is sufficient evidence to prove that the smoking of tobacco contributes to the impairment of longevity. From the available information, it appears that the moderate smokers are definitely shorter lived than the total abstainers from tobacco, and that the moderate drinkers are not significantly worse or better off than the total abstainers from alcohol.

The factors of alcohol and tobacco just mentioned are popular subjects of discussion at any meeting of either laymen or medical men when the subject of longevity arises. Let us now turn to a brief discussion of so-called degenerative diseases. Time does not permit a discussion of these diseases in any detail. I do want to reemphasize the fact that the greatest achievements of medicine have been in the control of infectious diseases and that the life span has not been increased appreciably. As a result of a decrease in the birth rate and infant mortality, and other factors, the population is shifting from youth to middle age. This shift in the structure of our population has caused a shift in our emphasis on infectious diseases to that of the degenerative diseases. These comprise a long list and the medical literature is replete with discussion of their pathogenesis and management. Cardiovascular diseases are especially in the minds of the layman and the physician because they are the number one killers. Recently Doctor Page, of Cleveland Clinic, gave an excellent discussion of the pathogenesis of arteriosclerosis. This discussion, along with one by Doctor Ivy on drug therapy in degenerative diseases, in a

recent issue of the *Journal of the American Medical Association*, is well worth reading.

Doctor Ivy thinks that there is plenty of evidence to show that cancer and the degenerative diseases, such as arteriosclerosis, can be brought under control. I am not so sure about that. I think it is possible to find some method of treatment such as we have found for infectious diseases, but in the nature of prevention of degenerative diseases we have been astray in our thinking. The answer to these problems should and will come from medical and allied scientific research; however, we must not overlook the most obvious source of the cause of degenerative diseases and shortening of the duration of life. Many researches are going on and a great deal of enlightening information has come forth on the pathogenesis of arteriosclerosis and atherosclerosis. It seems that cholesterol plays an important part in the production of these conditions. Studies are being made to determine why hypertension is practically nonexistent in China and India. Studies are being made in the islands of the Pacific relative to these problems. The geographic distribution of these diseases is of great interest. From our present knowledge it seems that arteriosclerosis might be a disease of civilization. The greatest hindrance to our studies is that this disease is not always in evidence in early life and we are unable to determine whether or not it will eventually develop in an individual. In my opinion, the answer to this problem will be found in the soil, and greater emphasis should be placed on research in this field. I am convinced that many diseases are due to eating foods grown in soil which is deficient in certain constituents necessary for good health. As civilization has moved westward it has pillaged the top soil of the earth and failed to restore or replace that which it has removed, and we are using devitalized foods grown in soil from which many of the necessary nutrients have been removed by our wasteful practices of farming and our failure to obey nature's laws.

Just as many societies have been formed to study infectious diseases, diseases of old age and what have you, an organization known as the Soil and Health Foundation has been recently organized for the purpose of studying the relation of disease to certain agricultural practices. The spirit of scientific inquiry must now be taken into this field. The foundation proposes to establish laboratories, experimental farms, and schools to educate the people concerning soils, food and the health of man.

Our age, though progressive in the arts, science, industry and business, has been woefully remiss in its attention to the inexorable laws of nature. We are without doubt the most wasteful nation on earth and have been wantonly destructive of our natural resources. We have learned and can learn much from the orientals, especially the Chinese, in maintaining the fertility of the soil. While we construct incinerators to burn our waste at a financial loss, the Chinese returns all waste matter to the soil at a huge profit. Just as rivers are purified so does the earth purify waste matter returned to it. Would it not be best for us, in these years in which the virility of our own soil is being taxed to the utmost to help in the adjustment of worldwide feeding problems, to meet this challenge of potential race suicide, by improving the quality of our food? I think the medical profession can play an important role in this work.

Regardless of how much we know about prolonging the span of human life, there is, likely, nothing that we will do about it personally. We will continue to advise our patients about health and continued living and we will continue dying of dumbness.

GOOD PEDIATRIC PRACTICE

Good pediatric practice includes an awareness of friction and tension in the home as a possible clue to certain functional disturbances and behavior problems in the child. The young child is an integral part of the family group; his life experiences are influenced by the attitudes and behavior of those in his immediate environment, especially his mother. We have a definite responsibility to those parents who seek counsel concerning a practical solution to many everyday problems arising in the lives of their children. The word practical is emphasized because these parents have so often become confused by conflicting opinions expressed theoretically by different authors in books dealing with child psychology and behavior characteristics.

Medicine is constantly enlarging its horizons in attempts to provide measures applicable in the prevention of disease. This phase of pediatrics seems provocative of further careful study in an effort to evaluate the role played by the factors of emotional stress in predisposition to disease.—Warren W. Quillian, M. D., in J. South Carolina Med. Assn.

PERCENTAGE OF CURES IN BRAIN TUMOR

The prime concern of the neurosurgeon is in brain tumors and their treatment. It seems of interest that the surgical mortality following the removal of a brain tumor is usually under ten per cent. Some sixty per cent of all brain tumors may be cured. There is, however, a large percentage, between thirty and forty per cent, which are malignant or potentially malignant and for which surgery is useless. It remains for the scientists of the future to find the cure for these malignant tumors, just as they must for the treatment of cancer elsewhere in the body.—Walter G. Haynes, M. D., in J. M. A. Alabama.

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SOME PRACTICAL CONSIDERATIONS IN THE USE OF CHEMOTHERAPY AND ANTIBIOTICS IN THE TREATMENT OF UPPER RESPIRATORY INFECTION*

By HENRY M. GOODYEAR, M. D.,
Cincinnati, Ohio

Penicillin and the sulfonamides have received so much publicity and often exaggerated reports of their effectiveness in various diseases that the public has come to look upon them as a necessity in all ills.

Penicillin has some advantages over the sulfonamides. In the presence of pus and disintegrating tissues it retains its antibacterial action. It is more effective against Staphylococci and against Streptococcus viridans. Strange to relate it has no appreciable action on bacteria in solutions in which there is no growth of the organisms.

Penicillin drops used in the nose may increase the swelling and the congestion of the membranes and from a practical standpoint penicillin drops used in the nose can touch only an infinitesimal part of the total membrane of the nasal passage. Besides, the amount of penicillin contained in the drops is insignificant in producing any great destruction of proliferating bacteria. Moreover, penicillin given in small doses may not only sensitize the patient but may produce bacterial resistance to penicillin.

ADMINISTRATION

If penicillin is indicated it should be given immediately and in large doses, assuring an adequate blood level for the days required. A week or ten days will usually suffice for the average severe acute infection of the middle ear if administration is started at the onset. At the same time we should not lose sight of the fact that many of our upper respiratory infections and middle ear infections seem to respond as well under the use of sulfadiazine.

One must be mindful that the severity of an infection bears no relationship to the penicillin dosage required for treatment. A mild furunculosis may be more refractory to penicillin treatment than a severe streptococcic sore throat. A general recommendation of small doses orally in mild infections and intensive dosage in severe infections is, therefore, fallacious. The only logical method is to give penicillin in sufficient quantities to insure adequate penicillin plasma levels.

AEROSOL ADMINISTRATION OF PENICILLIN

Particularly has aerosol administration recently been popularized as a cure for nasal sinus infections. Unfortunately, it is far from being the most effective treatment for any type of nasal sinus infection and has no permanent curative effect in subacute and chronic infections. In any acute upper respiratory infection the inhalation of oxygen and moist steam, whether it contain menthol, camphor, eucalyptus, or penicillin, has a soothing and often beneficial effect on the upper respiratory membranes. Oxygen or steam inhalations have long been used with considerable satisfaction, without penicillin. Penicillin undoubtedly is helpful in acute infections but it is more practical and better to give it parenterally. Since we now have procaine and penicillin combined in refined sesame oil of a sparingly soluble new salt, penicillin may be given hypodermically in the muscles of the upper arm or on the lateral side of the thigh with much less disturbance than that of injections deep in the buttocks. It saves the patient the disturbance of three hour injections, is less painful and of great advantage in office practice or at the home where nursing service is not available for injections every three hours.

This new salt was accidentally discovered in an attempt to use procaine with penicillin to prevent painful injections. Three hundred thousand units of penicillin can be given in one cubic centimeter of the oil which will maintain in 95 per cent of cases a satisfactory blood level of penicillin for twenty-four hours, while inhalations would have to be given under high concentrations constantly, or every few hours in order to obtain such a level.

Many patients with old chronic sinus infections are now coming to the otolaryngologist stating that they had waited in line for numerous inhalations of penicillin which temporarily made their nose more comfortable but had little or no effect upon their basic sinus infection.

AEROSOL ADMINISTRATIONS IN LARYNGOTRACHEITIS, CAPILLARY PNEUMONIA, AND BRONCHIECTASIS

In these conditions there is justification for using the moist inhalations, and the addition of 60,000 to 100,000 units of penicillin may enhance the effectiveness of parenteral injections. The addition of peppermint water will eliminate the disagreeable odor of the drug.

Most of the work has been carried on with the use of compressed oxygen in tanks with suitable valves for pressure control, connected with nebulizers, in turn connected with oxygen masks or inhalers of various types. Intermittent negative

*Presented before the 81st annual meeting of the West Virginia State Medical Association, at Huntington, May 10, 1948.

and positive pressure prevails. However, when such apparatus is not available simple atomizers capable of delivering a fine spray may be used.

Dr. Ashley Weech, Medical Director of the Cincinnati Children's Hospital, tells me that they have found lung tissue resected in cases of bronchiectasis to be sterile following the combined use of parenteral injections and inhalations of penicillin. It remains to be seen if sterilization might also occur with parenteral injections without inhalations, as the exchange of air in bronchiectatic cavities with dilated non-elastic walls is not great.

STREPTOMYCIN, ITS USE IN OTOLARYNGOLOGY

Streptomycin is giving some very spectacular results in tuberculosis of the larynx. Here, bed rest, absolute rest of the voice, plus the most important measure of all, collapse of the lung, is the treatment of choice. I feel that cauterization is often poorly done, that it requires very careful preparation to do it well and that it can be dispensed with in a great many cases in which collapse of the lung plus streptomycin are used. Should a labyrinth disturbance with deafness occur, histamine treatment intravenously should be administered on the basis of possible edema or hydrops of the labyrinth resulting from the streptomycin.

Streptomycin also deserves a trial in rhinoscleroma and atrophic rhinitis.

ANTIBIOTICS IN EAR INFECTIONS

Penicillin ointment used in the eye or in the external auditory canal may produce a sensitization in the matter of five to seven days and I have given up its use. However, combined sulfa powder, blown in the auditory canal, does often give satisfactory relief in infectious lesions of the auditory canal or middle ear.

For some time many reports were made concerning the use of sulfa powder or penicillin directly in the mastoid wound immediately following operation. Occasionally, there is some local reaction to such a procedure and my observation has been that sulfas given by mouth or penicillin given parenterally will produce better and more rapid healing.

Penicillin is more effective in mastoid infections with accumulation of pus than the sulfonamides. It has been my observation that most of the latent mastoids have been concealed by the use of sulfonamides. However, if we are on the lookout for the latent mastoid infections there is very little likelihood of complications developing unobserved.

ANTIBIOTICS IN MENINGITIS

Meningitis following middle ear infections requires immediate and vigorous treatment with large doses of penicillin parenterally (25,000 to 40,000 unit doses every three hours) plus intrathecal injection of 20,000 unit doses every twenty-four hours.

It has been demonstrated that very little absorption of the antibiotics occurs through normal meninges but once the meninges became inflamed the transmission of penicillin is greatly increased which is a point of great advantage in the treatment of these cases. If penicillin is given in concentration it may produce local irritation of the meninges and should be injected in the strength of 1,000 units per cubic centimeter of normal saline. Twenty thousand units thus injected will give an adequate concentration of penicillin in the spinal fluid for a twenty-four hour period. No more of the solution should be injected than the volume of spinal fluid withdrawn. In H. influenzae and B. coli meningitis streptomycin is indicated; 100,000 units should be given intrathecally every twenty-four hours and 1,000,000 to 4,000,000 units in divided doses intramuscularly or intravenously in each twenty-four hours.

SYMPATHECTOMY AND BLOOD PRESSURE

Sympathectomy constitutes a valuable weapon in the neurosurgeon's armamentarium. It is used for the treatment of various vasospastic diseases of the extremities and has been used for relief of hypertension of certain types. There is a great deal of controversy in this matter, but an essential hypertension which can be reduced, by the use of sodium amytal, to normal limits, and wherein there is no great myocardial or kidney or cerebral vascular change, falls into a group of favorable candidates. If such a favorable candidate is submitted to a sympathectomy, of an extensive enough type, that patient can expect to derive benefit and his blood pressure can be returned to normal in seventy per cent of the cases.—Walter G. Haynes, M. D., in J. M. A. Alabama.

A CHIEF MEDICAL PROBLEM

Rheumatic fever may be considered to be one of our chief medical problems. It is one of the main causes of death from disease in the school-age child. Almost any year, when we study mortality data in the five- to fourteen-year age group, we learn that this condition is responsible for more deaths than is diphtheria, poliomyelitis, scarlet fever, typhoid fever, measles, mumps, and meningococcic meningitis combined. Hence, even on the basis of mortality alone, this disorder is an important problem. Besides, we have no true index to the extent of its ravage in producing disability and crippling—"cripples who do not limp" or "cripples who cannot even walk."—Arild E. Hansen, M. D., in Texas Reports on Biology and Medicine.

The President's Page

If your interest in socialized medicine in the past few months has waned any at all, I am sure it has been reawakened by a number of Associated Press articles and the utterances of many prominent men in our country relative to the subject. Because it is so much in the papers today, I am prompted to have my say here:

At a recent meeting in Chicago of the National Conference of the Professions, sponsored by the National Physicians Committee, which is spearheading the opposition to socialized medicine in the United States, one of the principal speakers, Dr. Melchior Palyi, who just recently returned from a European lecture tour, stated that socialized medicine is described today as a peculiar type of legalized corruption. The speaker, who is a native of Hungary, and who probably knows what he is talking about, was an advisor to the German Reichsbank from 1931 to 1933. "Every system of socialized medicine," he said, "operates with huge deficits, and that ultimately at the cost of the taxpayer. Under every governmental system, medical practice suffers in quality. It results in deterioration and mechanized diagnosis and treatment.

"The two main systems of socialized medicine are German and French. The German system is now being introduced in Great Britain with the unhappy prospect of almost suicidal deficits.

"Under the French system the public gets free service and the doctor gets minimum fees. The result is that the doctors have no time for individual patients and can only make a living by serving a maximum number of them."

I do not know of a single medical man in West Virginia who has placed his stamp of approval on socialized medicine, nor do I know of any of our legislators who harbor any idea that we want this "peculiar type of corruption." Our program today does not include or contemplate any manner or form of socialized medicine. On the contrary, every activity that we are presenting to our people and to our legislators is a type of freedom of selection of the kind of life that they want to live.

It is interesting to note that the head of the Social Security Board, Mr. Ewing, is temporizing now with this form of socialized medicine, stating that every individual will have the free choice of physician, which we know is impossible in a socialistic type of practice. A large percentage of our doctors would not accept socialized medicine, which would leave the patient few medical men to call upon in time of illness. Then, too, we would lose the great humanitarian aspect of medicine which has been the bulwark of our profession.

While our big problem in West Virginia is the shortage of physicians, it cannot be solved by federal supervision. If legislators respond to the popular demand of the citizens, almost every state will have a Grade A medical school and a first class state health department.

Thomas Poe

President.

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PLIGHT OF THE PRE-DENTAL STUDENT

Since physicians are sympathetically interested in problems concerning dental science and practice, and since there is some agitation for the development of a School of Dentistry in this state, it seems in order to review briefly certain aspects which have to do with dental education.

William S. Guthrie, Junior Dean of the College of Arts and Sciences of Ohio State University, has recently published pertinent data regarding applications for the professional schools of medicine, dentistry, and veterinary medicine.[1] It may be recalled that in a previous editorial the plight of the pre-medical student was discussed.[2] Let us now examine the predicament of the pre-dental student.

Dean Guthrie finds that for the autumn Freshman class of 1948 there are 22,105 applications reported for 2,264 places. These data are based on the reports of 31 (of 40) dental schools and colleges in the United States. Many candidates, of course, apply to more than one school. Allowing for multiple applications, Dean Guthrie makes this significant statement: ". . . it is a certainty that less than a fourth of the individuals who apply this year will be admitted for 1948." Although the situation facing the pre-dental student is hardly as bleak as that which confronts his pre-medical brother, the former's position is surely not an enviable one.

It is of more than passing interest to observe that Northwestern University Dental School, which normally accepts about 100 students, had 1490 applicants, which number constituted 133.3 per cent more than in 1947. New York University had 1170 applicants which was 88.7 per cent more than in 1947, and so on.

It has been estimated by the United States Bureau of Labor Statistics that there will be a demand for at least 110,000 dentists by 1960—approximately 40,000 more than there were in the profession in 1940. Without burdening the reader with further statistics, it is estimated that to meet the need for dentists in this country 48,000 will have to be graduated during the decade of 1950-1960. It is concluded by the Bureau that this will be possible only if the capacity of the schools is greatly expanded. Parenthetically, it may be stated here that it probably would be difficult for many of the existing schools to train a larger number of students. It would appear, then, that several new dental schools should be developed.

The author of this editorial does not profess to be especially well-versed in problems concerning dental education, but this much can be said: Dental education is a very expensive undertaking. It is true that the basic sciences such as anatomy, bacteriology, biochemistry, pharmacology, pathology and physiology might be given by the staff of a medical school employing the same laboratories as those used by the medical students. The facilities for the last two years of the dental curriculum, that is, the clinical years, must be housed in an adequate building. The equipment to be used in this building, too, is a very expensive item. More important still is the fact that able and experienced teachers of dental science must be obtained.

MORE SUPPORT FOR MEDICAL SCHOOL

The views of both candidates for Governor of West Virginia concerning the proposed establishment of a four-year school of medicine and dentistry in West Virginia merit study by the members of the West Virginia State Medical Association. Letters from the two aspirants to this high office, in which they discuss this project that is backed solidly by the Association's Council and favored in planks of both party platforms, are

1. 1948 applications for the professional schools of medicine, dentistry and veterinary medicine in the United States.
2. W. Va. Medical Journal, 43:350 (Oct.) 1947.

reproduced in the news section of this issue of the Journal.

The views of the two candidates are important and thought-provoking at this particular time, as key committees which for months have been studying the advisability of the establishment of a four-year school in this state, have about completed their work, and a joint report will be made to the Council at a meeting which will probably be held in October.

We would suggest that the statements of both candidates be considered in connection with the platform declarations of the two parties, which were printed in the September issue of the Journal.

KNOW YOUR CANDIDATES

The election on November 2 is important for many reasons. Medicine is vitally interested, for an issue has been made of the bureaucratic plan for compulsory health insurance, which spells socialized medicine in any man's language.

The proposed health insurance plan is embodied in a 183-page report prepared by Oscar R. Ewing, Federal Security administrator, submitted to and approved by President Truman. However, it is significant that the National Health Assembly, which convened in Washington last May, turned thumbs down on this part of the proposed social security program.

Congress has already taken a firm stand against any form of compulsory health insurance. Tremendous efforts by a few members to thrust this piece of bureaucratic legislation upon the American people have met with failure. No version of the Wagner-Murray-Dingell bill has ever received favorable committee support.

The views of some Democratic and Republican candidates for Congress from this state are expressed in letters addressed to Dr. James S. Klumpp, chairman of the West Virginia Physicians committee, reproduced elsewhere in this issue of The Journal.

The candidates for the most part have spoken out against socialized medicine, and some have spoken fearlessly.

It is important that the members of the West Virginia State Medical Association take time out to read what these candidates have to say on this subject. If any member is of the opinion that the stated position of any candidate is not entirely clear, he should contact that candidate immediately and ask for a clarification of his views.

WASHINGTON MEDICAL PHANTASIES

The more we meditate upon some of the medical vaporings emanating from Washington the more confused we become. Mr. Oscar R. Ewing, Federal Security Administrator, has recently eructated figures to the effect that 325,000 Americans die annually from what amounts to medical neglect. We are told also that the President of the United States has not only accepted and swallowed these figures, but has given them out as authentic.

These gentlemen are, of course, attempting to lay the groundwork for compulsory sickness insurance and for the socialization (and shackling) of the medical profession. We wonder if the President and the Federal Security Administrator would condescend to furnish the statistics to prove their contentions? Ipse dixits should have no place in a democracy even in a political campaign.

Another item of Washington medical thinking which astounds us is the demand of the Army for one medical officer per 165 personnel. In time of actual conflict this seemed, to us at least, excessive, and in peace it appeals to us as little short of outrageous.

One physician, on the average, cares for 770 of the civilian population including infants, chronics and the aged, and even the star-gazers on the Potomac admit it is done better than most other places in the world. Why then should the Army need almost five times as many to care for a group of young adults who must be little short of physically perfect for admission into the group?

O Official Washington! Why shoot at the moon?

SPEED URGED

The local insurance agency which is handling the group health and accident insurance program for the members of the West Virginia State Medical Association reports that the goal is in sight. Nearly 500 members have already returned signed applications. It is hoped that the master policy may be put into effect by the middle of October. Members of the Association who have not yet mailed their applications for coverage in this group plan are urged to do so immediately. Application cards, with check, should be mailed to J. Banks Shepherd, Continental Casualty Company, Kanawha Valley Building, Charleston, West Va.

YOUR COMMUNITY CHEST

Community Chests, identified everywhere by the Red Feather, have generally been well supported by the educated professional men and women of America. Past years have shown that these groups are among the most aware of their obligations as citizens of their communities. It has always been sufficient to point out a bona fide need to have that need supplied.

Professional groups are also most aware of the alternatives involved in the support of health, welfare, and recreation services. These services are essential to the well-being of any community. If they are not supported privately, and adequately, pressure tends to bring on a government program.

Certain services, such as a sound local public health program and assistance to the actually indigent, are recognized as proper fields for government activity. Other services, long supported by private means and better administered privately, should remain so.

While we must face the necessity of adequate support through taxes for proper public welfare programs, we must be sure that we do not let the remaining private welfare services slip away through inadequate gifts.

The sole reason for the existence of a Community Chest is to coordinate the budgeting and combine the fund-raising efforts of a large number of these indispensable privately supported services. This is economical of time, money, and energy, and in addition it saves a vast amount of natural irritation that would result if each agency were to appeal separately to the public.

Community Chest goals will be five to twenty per cent higher this year than last. This is due, of course, to rising costs which have affected everything from camping equipment for Boy Scouts to salaries for trained workers. This is the reason for the Community Chest slogan "When You Give . . . Give *Enough!*"

Community Chests need, and are counting on increasing help from the professional groups, who understand the community's problems, and who see clearly in what direction their solution lies.

WILL C. BRAUN

As this issue of The Journal goes to press, we learn with much sorrow of the death on September 12, of Will C. Braun, of Chicago, who served as business manager of the Journal of the American Medical Association for over thirty years.

THE USO—BACK ON THE JOB!

More than a year ago, Secretary of Defense James Forrestal foresaw that the creation of an enlarged military establishment would inevitably bring in its train grave problems affecting the welfare and morale of service personnel. Therefore, he appointed a Civilian Advisory Committee to recommend a plan to meet these needs.

This summer the Committee recommended, and Secretary Forrestal approved, the reactivation of the USO for this purpose. In July, the Secretary asked that the nation's Community Chest assist in the support of the new USO by including it in their 1949 budgets to be raised in local Red Feather campaigns this fall.

The USO has never quailed at a big job. It will again be a two-way channel connecting every military post with Main Street, USA. The six original agencies of the war-time USO, National Traveler's Aid (NTA), Young Men's Christian Association (YMCA), Young Women's Christian Association (YWCA), Jewish Welfare Board (JWB), National Catholic Community Services (NCCS), and the Salvation Army, have agreed to take on this new challenge.

At the present time USO is financing services for members of the armed forces in 65 communities. In addition, USO funds are currently financing Veterans' Hospital Camp Shows, successor to USO Camp Shows.

Beginning in 1949, new USO services will be based upon requests from the Army, Navy and Air Forces. "When you give through your community chest . . . give enough for USO, too!"

STUDENT SELECTION

Deans and other members of academic and administrative staffs spend much of their time in assessing the claims of would-be students. Their task has lately become harder than ever. For the coming academic year one London school has had about 700 applications for 65 places, another 600 for 100 places, and a third 400 for 20 places. A provincial university has had 1420 applications for 100 places.

Some think that the present surge of candidates will soon subside; after the first world war the number of registered entrants rose sharply in 1919 to a peak of 3420; but by 1923 it had fallen to 545. So far, however, there are few signs of a reduction in applications and there are grounds for believing that the pressure will not diminish materially within the next few years.

The number of entrants to medicine tends to vary inversely with the nation's prosperity, for in times of economic uncertainty parents regard medical training as a good investment for their children.—The Lancet.

General News

CONGRESSIONAL CANDIDATES STATE POSITION ON SOCIALIZED MEDICINE

Dr. James S. Klumpp, of Huntington, chairman of the West Virginia Physicians Committee, a branch of the National Physicians Committee, has been undertaking to obtain statements from all of the West Virginia candidates for Congress concerning their views on compulsory health insurance. His committee has been working in full cooperation with the NPC in its fight against any form of socialized medicine.

On August 17, Doctor Klumpp addressed a letter to each candidate, stating, in substance, that the doctors in West Virginia are interested in all public affairs, but particularly in matters which affect public health and the medical profession.

Doctor Klumpp has received replies from both candidates for United States Senator and from a number of candidates for House of Representatives.

The following are excerpts from the letters written to Doctor Klumpp:

United States Senate

"I may say to you, in summary, that I favor federal aid for research and aid for the expansion of medical services throughout the country, particularly for those who may be in need.

"I am definitely opposed to any control of any kind over the relation of doctor and patient or what is known as socialized medicine, which also includes the suggested program of compulsory health insurance.

"My position upon this was expressed in an address which I made before the West Virginia Medical Association at their convention last year in Charleston. My remarks were published in the West Virginia Medical Journal in the issue of the month following the convention.

"My position upon the floor of the Senate as well as my expressions outside have been in keeping with my definite view against the regulation by the federal government over the practice of medicine or the control of those engaged in that profession.

"This is in keeping with my position generally upon the subject of government controls."—Chapman Revercomb (R).

United States Senate

"Of course, I am in favor of the highest attainable degree of national health. But, I am also in favor of achieving this consummation by proper democratic means.

"Specifically I do not favor, and would not vote for a measure that would deprive rational men and women of their right to choose who should minister to them either in sickness or in health. An indication of my life-long attitude toward unnecessary governmental compulsion, whether direct or indirect, may be found in the accompanying message by means of which, as Governor, I vetoed a bill requiring all West Virginia lawyers to join the State Bar Association.

"My solicitude for the liberty of the doctors is just as great as that which I manifested for the liberty of the lawyers in my veto message."—M. M. Neely (D).

House of Representatives—First District

"Generally speaking, I am absolutely opposed to socialized medicine or anything I believe to be closely allied. The exercising of individual initiative under our system of free enterprise is, in my opinion, the principal reason for the tremendous strides which have been made in medicine over the years. Any attempt to change this system should be weighed carefully."—Francis J. Love (R).

Second District

"I have your letter of August 17, and I have heretofore taken the position against socializing the medical profession of the United States."—Melvin C. Snyder (R).

Second District

"As I understand the issue (Compulsory Health Insurance), I am against it for it seems to me that it tends to destroy individual initiative."—Harley O. Staggers (D).

Third District

"As you may recall, I have been opposed to this proposition (Compulsory Health Insurance). My position is unchanged."—E. G. Rohrbough (R).

Third District

"This is an instance in which, I am sure, frankness on the part of everyone concerned will be helpful. As a member of the 79th Congress, I am sure I was 'tagged' as an advocate of socialized medicine. How this happened I failed to understand since the bill pending in Congress never was reported out of committee and I, therefore, had no opportunity to go on record in the matter one way or the other.

"Frankly, Doctor, I, like a lot of other citizens, do not approve of all the things that the National and State Medical Societies do, but certainly any personal feeling I have in the matter would not be sufficient to warrant my supporting a departure so radical as this proposal appears to be."—C. M. Bailey (D).

Fourth District

"On many occasions I have made known to your associates my position on what is generally referred to as socialized medicine. I have consistently been opposed to it and at this time I do not think it is the solution to the problem. In my opinion an adequate health service should be made available to people in the lower income bracket. However, it can be done more efficiently through private means. It has been demonstrated time and again that when any institution goes from private control into government control efficiency diminishes at an astonishing rate and costs multiply. The people can manage their own affairs much better than some government appointee who knows nothing about it."—Hubert S. Ellis (R).

Fourth District

"I do not believe in socialized medicine. I have recently joined the Blue Cross plan for hospital care. I have not read the many bills for 'compulsory health insurance', but I have read some of the arguments for and against (it) in some of the popular magazines. The greatest need seems to me to be improved and expanded medical school facilities and longer training in specialized fields of medicine."—M. G. Burnside (D).

Sixth District

"I wish to advise I have been a practicing physician for more than twenty-eight years and still maintain my office in Beckley. I have been opposing socialized medicine and many other proposed bills which would directly or indirectly affect our profession. I wish to assure you that I will continue my efforts along these lines if I am re-elected to Congress on November 2nd."—E. H. Hedrick, M. D. (D).

At the time this news article is being written (September 14), Doctor Klumpp has not received replies from Robert L. Ramsey (1st District), John Kee and Hartley Saunders (5th District), and D. L. Salisbury (6th District).

CANDIDATES FOR GOVERNOR STATE VIEWS ON ESTABLISHMENT OF FOUR-YEAR SCHOOL OF MEDICINE AND DENTISTRY

BOTH MAJOR PARTIES FAVOR PROJECT

Early in September, identical letters were addressed to Okey L. Patteson, Democratic candidate for Governor, and Herbert S. Boreman, candidate for that office on the Republican ticket, requesting for the readers of the West Virginia Medical Journal a statement of views in connection with the establishment in this state of a four-year school of medicine and dentistry. The establishment of such a school has the unanimous endorsement of the Council of the West Virginia State Medical Association, the American Legion, and various other organizations in the state, and the platforms of both major political parties include planks favoring the project.

Both candidates have responded favorably to the request that they state their views with reference to this matter, so important to the people of this state. The letters received from the two candidates for the office of Governor of West Virginia are as follows:

CAMPAIGN HEADQUARTERS, OKEY L. PATTESON
Democratic Candidate for Governor
Charleston, W. Va.

September 13, 1948.

Honorable Charles Lively
Executive Secretary
State Medical Association
Charleston, West Virginia

Dear Charley:

I acknowledge with pleasure your letter of September 4, calling my attention to the fact that both the Democratic and Republican platforms advocate the establishment of a four-year school of medicine in West Virginia; and further, that the American Legion, at its State Convention, adopted a resolution favoring such action. I am also happy to note that the Council of the State Medical Association has unanimously gone on record as favoring such a great forward step, and that committees of the Association are now working on this problem, in connection with the forthcoming session of our Legislature.

It is a privilege to comply with your request that I give further expression of my views to you, so that such may be reproduced in the October issue of the Medical Journal.

You doubtless recall that at the very outset of my campaign, I advocated this most important expansion in the educational facilities of our State. In fact, I had discussed the matter long and seriously with many of my close friends in the medical profession, always maintaining that West Virginia was in serious need of a real four-year medical school. Therefore, being the first candidate to advocate such, I most assuredly would be the last to retract from such a position.

The medical profession needs this school, but above and beyond that, the people of our State need those who will graduate therefrom. Doctors and dentists can do so much to make our people a healthier and happier people. Our young men should not be forced to shop around throughout the nation to try to secure a medical education, such often resulting in disappointment and eventual abandonment of their high and worthy ambitions and aspirations.

I, therefore, assure you, and through you the medical profession and the people of my State, that as Governor, one of my first major recommendations to the Legislature will be the establishment of a four-year school of medicine, which should also include a four-year school of dentistry.

With every good wish, I am,

Sincerely yours,

(Signed) Okey L. Patteson.

HERBERT S. BOREMAN
REPUBLICAN CANDIDATE FOR GOVERNOR
Parkersburg, W. Va.

September 10, 1948.

West Virginia State Medical Association
Attention: Mr. Lively, Executive Secretary
P. O. Box 1031
Charleston 24, West Virginia

Gentlemen:

It is a pleasure for me to respond to your letter of September 4, 1948, relative to the proposal to establish a four-year school of medicine and dentistry in West Virginia. You have asked me for an expression on this subject in the form of a letter which may be reproduced in the October issue of the West Virginia Medical Journal.

First, I would direct your attention to the platform adopted by the Republican State Convention held at Charleston, West Virginia, on August 14, 1948. The plank in that platform titled "Public Health" contains this statement:—

> "Realizing that there is an insufficient number of medical doctors and dentists in the State of West Virginia, and the difficulty of dental and medical students from this state to gain entrance to medical and dental colleges, we advocate and favor the establishment of a four-year medical and dental college in this state."

This plank was presented to me for my approval before it was offered to the Republican Convention.

From my own personal observation, and from information received from reliable sources, it appears that many young men and women of West Virginia who desire to study medicine and dentistry are unable to gain admittance to medical and dental schools and colleges in other states. The general impression seems to prevail that our state is not making adequate provision for its young people who desire to engage in the practice of these professions.

The problems presented in connection with the creation and maintenance of such schools are many and the solution of them would require comprehensive study. I am sure that the officers and members of your association could be counted upon to lend every assistance in the development of plans for the establishment of accredited four-year schools of medicine and dentistry, and in working out all problems concerning medical, dental and public health needs of the people of West Virginia.

Most sincerely,

(Signed) H. S. Boreman.

The plank in the Republican platform concerning a four-year school of medicine and dentistry is quoted verbatim in Senator Boreman's letter. The plank in the Democratic platform, adopted August 14, is as follows:

> "We favor such legislation and appropriation as will eventually lead to a four-year medical school in our state. This program, endorsed by the medical profession and so needed by the people of our state, is worthy of the support of all our citizens."

The planks on public health of both platforms are reproduced in full in the September issue of the West Virginia Medical Journal.

PROFESSIONAL AND LAY GROUPS TO ATTEND FALL PSYCHIATRIC SEMINAR

Final arrangements have been made for the psychiatric seminar at St. Mary's Nurses' Home, in Huntington, October 6-7, which is being sponsored by the bureau of mental hygiene of the state health department and the U. S. Public Health Service in cooperation with the mental hygiene committee of the West Virginia State Medical Association.

Object of Seminar

The object of the seminar is the psychiatric education not only of the physician, but of those engaged in industrial, personnel, and public relations work, as well as those who represent law enforcement agencies. The incidence and emotional aspects of various mental diseases will be discussed, and an effort will be made to demonstrate what can be done to rehabilitate the mentally ill in the hope that institutional treatment will not be necessary.

All sessions will be open to the public, and reservations for the luncheon and dinner should be made in advance by letter or wire addressed to the Bureau of Mental Hygiene, State Health Department, Charleston. It is hoped that doctors and laymen from every section of the state will be present.

An interesting program has been arranged by Dr. William B. Rossman, director of the bureau of mental hygiene, and Dr. Joseph L. Knapp, superintendent of Weston State Hospital.

The meeting is scheduled to open Wednesday morning, October 6, at 9:30 o'clock, with short introductory remarks and addresses of welcome by Doctor Knapp and Dr. N. H. Dyer, state health commissioner.

Robert H. Felix, M. D.

C. Charles Burlingame, M. D.

Dr. Felix on Program

Dr. Robert H. Felix, of Washington, director of the mental hygiene division, USPHS, will be the first speaker on the program. He will present a paper on "The Mental Hygiene Program: What it is and What it Means to West Virginia." Also appearing on Wednesday's program will be Dr. Oscar B. Biern, of Huntington, whose subject will be "The Internist Discusses His Psychiatric Patients"; Dr. William Hamm, of the department of plastic surgery, Emory University School of Medicine, Atlanta, Georgia, who will present a paper on "Psychiatric Aspects of Plastic Surgery"; and, Dr. Ray O. Noojin, of the department of dermatology and syphilology, University of Alabama School of Medicine, who will discuss "Psychological Factors in Common Skin Diseases."

Dr. Burlingame Banquet Speaker

A reception is planned for Wednesday evening, to be followed by a dinner, with Dr. C, Charles Burlingame, psychiatrist-in-chief, Institute of Living, Hartford, Connecticut, as the principal speaker. His subject will be, "Good Psychiatry is Good Medicine." Other speakers and guests will include Dr. Thomas A. Bess, president of the West Virginia State Medical Association, Dr. Thomas G. Reed, president elect, and Mr. Charles Lively Executive Secretary.

Dr. Frederick G. Dershimer, of the E. I. du Pont de Nemours Company, Wilmington, Deleware, will open the program on Thursday morning, October 7, with an address on "Emotional Factors in Industry." He will be followed by Dr. Yale D. Koskoff, of the department of neurological surgery, University of Pittsburgh School of Medicine, who will discuss the interpretation of common neurological complaints including headaches, dizziness, weakness and pain.

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RESEARCH IN THE SERVICE OF MEDICINE

SEARLE

Roundtable Luncheon

A roundtable luncheon is scheduled for Thursday noon in the cafeteria at St. Mary's Hospital, with Dr. T. S. Hill, of the University of Tennessee College of Medicine, Memphis, as the guest speaker. Doctor Hill's subject will be "The Use of Community Resources in the Handling of the Psychiatric Office Patient." Other speakers on the afternoon program will include Dr. R. Finley Gayle, of the department of neuropsychiatry, Medical College of Virginia, Richmond, who will discuss "Modern Methods of Psychiatric Treatment," and Dr. Robert N. Creadick, assistant professor of obstetrics and gynecology, Duke University School of Medicine, Durham, North Carolina, who will present a paper on "Psychosomatic Aspects of Menstrual Disorders."

A general invitation to attend the sessions has been extended to personnel directors of all industries in the state, officers and members of parent teachers associations, representatives of the judiciary, law enforcement agencies, and social service workers.

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REFERENCES

DR. T. DUCKETT JONES TO ADDRESS WEST VIRGINIA HEART ASSOCIATION

Dr. T. Duckett Jones, of New York and Boston, will be the principal speaker at the fall meeting of the West Virginia Heart Association, scheduled for the Hotel Morgan, at Morgantown, Friday, October 29.

The afternoon session, which will get under way at 2:00 o'clock in the ballroom at the hotel, will be devoted to clinical cases, and Doctor Jones will lead the discussion. A business session will follow the scientific program.

Doctor Jones will be the speaker and guest of honor at the dinner for members of the Association, which will be held in the same hotel at 6:30 o'clock.

All members of the West Virginia State Medical Association are eligible for membership in the West Virginia Heart Association, and application for membership should be addressed to the secretary, Dr. Fred Richmond, of Beckley.

Requests for hotel and dinner reservations and football tickets for West Virginia's homecoming game with the University of South Carolina on Saturday, October 30, will be handled by Doctor Richmond, and all doctors who expect to attend the meeting are requested to make reservations without delay.

PHC MEETS OCT. 4-6

The fall meeting of the public health council will be held at the Daniel Boone Hotel in Charleston, October 4-6, for the purpose of examining applicants for licensure in West Virginia.

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DR. SALKIN MOVES TO CALIFORNIA

Dr David Salkin, superintendent of Hopemont Sanitarium, at Hopemont, has tendered his resignation effective October 1. He has accepted appointment as clinical director (chief of professional services) at the Veterans Administration Hospital, in San Fernando, California, and will leave soon with his family for his new location.

Doctor Salkin came to Hopemont from Michigan over twelve years ago, serving as medical director at that tuberculosis sanitarium until his appointment as superintendent to succeed Dr. A. V. Cadden.

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RELOCATIONS

Dr. Nicholas F. Sabbagh, of Charleston, has located at Dorothy, where he will continue in industrial practice.

* * * *

Dr. Charles B. Mitchell, of Valley Head, has moved to Cleveland, Ohio, where he has accepted a fellowship with the Cleveland Clinic Foundation.

* * * *

Dr. Glen F. Palmer, formerly of Charleston, who has been engaged in industrial practice at Kimberly, is taking a post-graduate course in orthopedic surgery at Tulane University of Louisiana School of Medicine.

* * * *

Dr. G. Douglas Hayden, of Huntington, has accepted a two-year residency in otolaryngology at the Medical College of Virginia Hospital, in Richmond.

* * * *

Dr. H. M. Coleman, formerly of Iaeger, has located at Louisville, Kentucky, where he has offices at 723 East Chestnut Street.

* * * *

Dr. C. L. Houck, who has been located at Carbon for several years, has moved to Lewisburg, where he will continue in general practice.

DR. ELLISON CERTIFIED AS DIPLOMATE

Dr. A. B. Curry Ellison, of Charleston, has been certified as a diplomate of the American Board of Internal Medicine.

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NORTHERN DISTRICT HEALTH CONFERENCE

The annual meeting of the Northern District Health Conference, originally scheduled for October 8 at Fairmont, has been changed to October 22. The change was made in order that public health workers might have an opportunity to attend the psychiatric seminar at Huntington, October 6-7.

The following program has been arranged for the conference at Fairmont, which is scheduled to get under way at 9:30 A. M. at the Fairmont Hotel with Dr. Glenn Evans, director of the Marion County Health Department, presiding as chairman:

"Legislative and Organizational Plans for the State Department of Health"—Dr. N. H. Dyer, state health commissioner. Discussant: M. A. Viggiano, M. D., director Wetzel County Health Department, New Martinsville.

"Grading and Other Aspects of Restaurant Sanitation"—Mr. W. W. Marshall, Principal Sanitarian, Monongalia County Health Department, Morgantown. Discussant: Mr. A. T. Knabb, sanitarian, Hancock County Health Department, New Cumberland.

"Mental Hygiene in the County Health Department" —Wm. B. Rossman, M. D., acting director, Bureau of Mental Health, Charleston. Discussant: G. P. Morison, M. D., Director, Tri-County Health Department, Martinsburg.

"Participation of the Teacher and Nurse in School Health Services"—Miss Anne McCauley, supervising nurse, Northern District, Romney. Discussant: Mrs. Olive Snyder, supervising nurse, Marion County Health Department, Fairmont."

The afternoon will be devoted to section meetings, which will be attended by county health officers, public health nurses, and sanitarians.

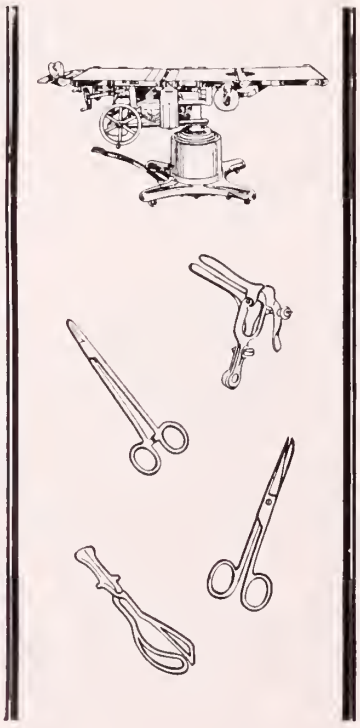
A MORAL OBLIGATION

A private practitioner of medicine has a moral obligation to the people to assist in furthering community health programs. At the same time he will contribute to the economic improvement not only of himself but also of his entire community.—V. A. Getting, M. D., in New England J. Med.

INSURANCE GOAL ALMOST REACHED

Nearly 500 members of the West Virginia State Medical Association have qualified for group health and accident insurance under the program being sponsored by the Association. Local representatives of the Continental Casualty Company report that company officials have agreed to make the master policy effective when 600 members have filed applications. This concession will probably make it possible for the plan to be placed in effect much sooner than would have been the case had it been necessary to wait until fifty per cent of the membership had returned signed applications.

It has been made plain by representatives of the insurance company that doctors who have filed applications will not be covered until the master policy becomes effective.



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SOUTHERN MEDICAL TO MEET OCT. 25-28

A large group of West Virginia doctors will attend the 42nd annual meeting of the Southern Medical Association at Miami, Florida, October 25-28. The Dade County Medical Society will serve as host at the meeting, which will be held at Dinner Key, the former Pan American Air Depot in that city.

This famous site, from which Pan American dispatched its huge flying boats before the war, has recently been acquired by the city of Miami and converted into one of the best convention centers in the country.

"Miami Day" will be observed on the afternoon of October 25, and a clinical program will be presented by doctors from that area. Meetings of the twenty-one sections will start Tuesday morning, and papers will be presented by outstanding men in their respective fields.

Sessions will be held mornings and afternoons each day with the exception of October 26, when no sessions will be scheduled for the afternoon. The scientific and technical exhibits and some of the meetings are scheduled for the new convention center.

The general public sessions will be held at the municipal auditorium just off Biscayne Boulevard. Hotel reservations may be obtained by addressing the Hotel Committee, Southern Medical Association, Miami Convention Bureau, 320 N. E. Fifth Street, Miami, Florida.

DR. BUFORD HEADS NEW SECTION

Dr. Robert K. Buford, of Charleston, was elected chairman of the West Virginia Section of the Southeastern Surgical Congress, at the annual meeting held at Huntington, September 3-4. He succeeds Dr. R. J. Wilkinson, of Huntington.

Other officers were elected as follows: Vice chairman, Dr. E. L. Gage, of Bluefield; treasurer, Dr. Francis L. Coffey, of Huntington; and secretary, Mr. R. J. Wilkinson, Jr., of Huntington.

Drs. James S. Klumpp and J. F. Barker, of Huntington, Claude B. Smith and Bert Bradford, Jr., of Charleston, Thomas K. Laird, of Montgomery, and Charles D. Hershey, of Wheeling, were elected members of the executive committee.

More than eighty surgeons from over the state were present and all of the scientific sessions were well attended. Dr. Lucien A. LeDoux, of New Orleans, president of the Southern Medical Association, was guest speaker at the luncheon on September 3, and Dr. Herbert Acuff, of Knoxville, Tennessee, president elect of the International College of Surgeons, presented a paper on "Peptic Ulcer" at the banquet that evening.

NEW SECRETARY IN BOONE

Dr. Harry A. Smith, of Madison, has been named secretary of the Boone County Medical Society to succeed Dr. David H. Hill, resigned.

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TRAILER UNIT TO PROVIDE SODIUM FLUORIDE TREATMENT FOR CHILDREN

A program providing dental prophylactic treatment with a 2 per cent solution of sodium fluoride has been arranged by the state department of health for the school children of West Virginia.

All children in grades one through six will be eligible for this service. Pre-school children will also be given the applications if brought to the dental trailer unit, which will be staffed by a dentist, Dr. R. A. Woelfel, of Huntington, two dental hygienists, Miss Norma Jean Elder, of Middlebourne, and Miss Jane Bryant Lewis, of Beckley.

One of the purposes of the unit is to demonstrate to the public, dental hygienists, and dentists, the value of applying sodium fluoride for the prevention of dental decay. According to the research department of the USPHS, there is an approximate 40 per cent reduction in the incidence of dental decay effected by the use of sodium fluoride. Practicing dentists will be requested to attend the demonstration as part of the educational program.

The trailer unit will visit a county only on the request of the component dental society in the area. The various societies are meeting this month to decide whether such a request should be made to the state health commissioner.

The 79th Congress appropriated $1,000,000 for this service. The fund, which will be administered by the United States Public Health Service, will be used to provide a demonstration unit, with attendant personnel, for each state through July 1, 1949.

The budget of the state department of health, which is being prepared by Dr. N. H. Dyer, state health commissioner, for presentation to the 1949 Legislature, will include a request for sufficient funds to carry on a general dental health program and the continuation of the demonstration unit after the federal funds are withdrawn at the end of the next fiscal year.

The new service will augment the existing general dental health program. One of the department's dental trailers, now being used for the correction of dental defects in indigent children, will accompany the demonstration unit.

The treatment recommended by the USPHS, which is a preventive measure, contemplates applications at the ages of 3, 7, 10 and 14 years, which will afford treatment for all the "baby teeth" through the various stages.

Sodium fluoride will be furnished by the state department of health without charge to the practicing dentists of West Virginia.

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STATE SOCIETY GIVEN RECOGNITION

Dr. A. B. Bowyer, of Charleston, secretary-treasurer of the West Virginia Society of Anesthesiologists, has been informed by the American Society of Anesthesiologists that his organization has been recognized as a component society of the parent organization.

The following charter members of the West Virginia Society are members of the national group: Drs. D. E. Greeneltch, Wheeling; John F. Morris, Huntington; A. B. Bowyer, Charleston; E. B. Tucker, Morgantown; S. Elizabeth McFetridge, Shepherdstown; Stanley Weinstein, Huntington; Lester D. Norris, Fairmont; and John R. Godbey and N. H. Newhouse, Charleston.

The West Virginia Society of Anesthesiologists was organized last May during the annual meeting of the West Virginia State Medical Association.

MEDICAL DIRECTOR NAMED FOR POTTERIES

Dr. Joseph T. Noe has been named medical director for six potteries located in East Liverpool and Wellsville, Ohio, and Chester and Newell, West Virginia, employing approximately 6,700 persons. He succeeds Dr. Elmer F. Herring, who resigned August 1, to engage in private practice at San Fernando, California.

Doctor Noe has recently been serving as assistant medical director for the Inland Steel Company, at East Chicago, Indiana.

THIRTEEN TREATMENT AND TUMOR CLINICS IN OPERATION IN STATE

The fourth anniversary of the division of cancer control of the state department of health was observed on August 15.

Only six other state departments of health had divisions of cancer control at the time the division was established in West Virginia. Since its creation in 1944, the division has carried on a four-point program of treatment, education for lay and professional groups, aid in the establishment of tumor diagnostic and treatment clinics, and tissue diagnostic service to needy cancer patients.

During the four years it has been in operation, 2,007 persons have been referred to the division. Of this number, 901 were placed under active treatment, 452 died, 200 were in the advanced or incurable stage. 434 were non-malignant, and 107 were financially ineligible.

For the past two years the division has had a budget of $85,000, which includes a federal grant of $35,000 which is used for educational purposes only. Prior to July, 1946, the division operated solely on the state appropriation of $50,000. Of the total budget, one-fifth was spent for actual treatment, with the average cost per patient being about $140,00.

At the present time the following thirteen approved

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tumor and treatment clinics are in operation in West Virginia: Mountain State Tumor Clinic, and Charleston General Tumor Clinic, Charleston; Laird Memorial Tumor Clinic, Montgomery; St. Mary's Tumor Clinic, Huntington; Bluefield Tumor Clinic, Bluefield; Fairmont Tumor Clinic, Marion County Health Department, Fairmont; Morgantown Tumor Clinic, Monongalia County Health Department, Morgantown; The Golden Clinic, Elkins; The Myers Clinic, Phillippi; Wheeling Clinic, Wheeling; Beckley Clinic, Beckley; Clarksburg Treatment Center, Clarksburg; and Parkersburg Treatment Center, Parkersburg.

The West Virginia Cancer Society has established four Cancer Information Centers in the state, one each in Charleston, Clarksburg, Wheeling and Bluefield.

For several years cancer has been the second leading cause of death in West Virginia, as well as the United States. According to Dr. N. H. Dyer, state health commissioner, 1,947 deaths from cancer were reported to the state department of health in 1947. The highest number of deaths, 934, was in the age group of 65 years and over. In the age group from 1 month to 25 years, there were 41 deaths due to cancer; 9 deaths each in the age groups 1 to 4 years, and 15 to 19 years; and 10 deaths in the group 10 to 14 years.

Cancer of the digestive organs and peritoneum took the greatest toll, accounting for 838 deaths last year, while cancer of the brain and central nervous system was low with only 33 deaths reported. There were but 98 more female deaths due to cancer than males, with cancer of the uterus, 247, and cancer of the breast, 116, causing the largest number of deaths. Among males, cancer of the male genital organs and the respiratory system caused 119 deaths each.

A. M. A. INTERIM MEETING

The annual Interim Meeting of the American Medical Association will be held at St. Louis, November 30-December 3.

Planned to be especially valuable to the general practitioner, the Interim Session will offer lecture meetings, conducted by medical leaders on conditions most often seen in daily practice. Subjects to be discussed include diabetes, heart disease, cancer, poliomyelitis, obstetrics, pediatrics, dermatology, genitourinary conditions, hypertension, anesthesia, tuberculosis, jaundice, laboratory diagnosis, x-ray diagnosis, and physical medicine as applied to the treatment of arthritis.

Diagnosis and treatment will be stressed in a wide variety of clinical conferences, which will be correlated with the lecture meetings. Leading practitioners from all sections of the nation will conduct these conferences.

Reservations for hotel rooms are now being cleared through the Sub-Committee on Hotels, American Medical Association, Hotel Reservation Bureau, 1420 Syndicate Trust Building, St. Louis.

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Book Reviews

THE ESSENTIALS OF PATHOLOGY—By Lawrence W. Smith, M. D., F.A.C.P., and Edwin S. Goult, M. D., F.A.C.P. Third Edition. Pp. 764. The Blakiston Company, Philadelphia. 1948. Price $12.00.

This book, as the title indicates, is not an encyclopedia of pathology. Rather it is an aid for the student seeking familiarity with the essentials of the subject. The authors approach their subject with the premise that pathology represents the scientific study of the alterations of cell form and function and that clinical medicine is the attempt to interpret and to correct these altered functions. Very logically, therefore, considerable space is devoted to function (physiology) as expressed in case histories, and the aberrations in function are correlated with the tissue changes. The 261 case histories, together with pictures of gross and microscopic pathological slides, x-rays, etc., and description of general and specific pathological processes, constitute 763 pages of clinicopathological conferences.

This is the third edition of this work since 1938. Those familiar with earlier editions may be interested to learn that this retains the previous format altho the pages are somewhat reduced in size and number for easier handling. The text has been reset, revised, and brought up to date. The illustrations have been further increased in number and quality.

Because it expresses his sentiments so well, the reviewer cannot resist including the following excerpt from the Foreword by the late Dr. James Ewing: "In the present treatise, Dr. Smith and his collaborators have succeeded, to an admirable degree, in covering the broad field of pathology from the standpoint of the student's needs and laws of psychology. They balance the clinical picture with as much theoretical data as it will carry and make it possible for the student to undertake histopathological interpretation with interest and intelligence."

Wonderfully adapted to the use of teacher and student of pathology, this book should also be accessible to every hospital intern and resident.—G. G. Irwin, M. D.

GENERAL ENDOCRINOLOGY—By C. Donnell Turner, Ph. D., Associate Professor of Zoology, Northwestern University. Pp. 604. Philadelphia and London. W. B. Saunders Company. 1948. Price $6.75.

This is a textbook intended for advanced college students who have had a thorough grounding in general biology. The emphasis is on the experimental basis of endocrinology rather than on clinical conditions, but the theoretical background for the understanding of endocrine diseases in the human is carefully presented.

There is included considerable material on interspecies differences, and much material, both experimental and clinical, on man. Two introductory chapters cover the scope and history of endocrinology, and general principles applicable to all living organisms.

Considerable care is used to define a hormone, and

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it is pointed out that within this definition some substances which are vitamins for animals are hormones for plants, e. g. thiamine, which in plants is produced in the leaves and is necessary for root growth.

The place of the endocrine system in the economy of the organism is carefully examined. It is stated that "the nervous system is specialized for the rapid adjustment of functions and that the endocrine system is specialized for the control of processes which require duration rather than speed."

Adequate consideration is given not only to the physiology of those structures which are undoubtedly endocrine glands, but also to regions not organized into definite glands of internal secretion, such as those portions of the gastrointestinal tract which elaborate substances which act at a distance—secretin, antianemic factor, etc. In addition, what evidence there is for an endocrine function of certain organs of dubious function (pineal, thymus) is collected and criticized.

In cases where there are various theories about functions, the author presents a critical analysis of the evidence for and against the different view, and gives his own judgment on what he considers to be tentatively the best explanation Certain of his arguments on controversial points are especially striking. For instance, he notes the fact that it is impossible by histologic technique to separate the secretory elements of the anterior lobe of the pituitary into as many subgroups as there are biologically active principles obtainable from the gland, but that this situation is paralleled in the acinar portion of the pancreas, where several enzymes are produced from one type of cell with zymogen granules which all stain alike.

Some material on plant endocrinology, and a long chapter on the endocrinology of the invertebrates are included. With the exception of one review article, this is the first time, within the knowledge of this reviewer, that this invertebrate material has been collected in one place.

This work should be useful to research workers in endocrinology, as well as to students. The bibliography, while not exhaustive, comprises 1439 citations, and is comprehensive enough to give one a good start in the literature of any particular field. There are many references to classic papers in the various branches of endocrinology.—David W. Northup, Ph. D.

The largest single purchaser of hospital and medical services in the world today is the United States government which last year spent $1,050,000,000 not including expenditures for hospital construction.—News Letter, Am. Coll. Radiology.

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Surgical Technique, Surgical Anatomy & Clinical Surgery, Four Weeks, Starting October 11, November 8.
Surgical Anatomy & Clinical Surgery, two Weeks, Starting October 25, November 22.
Surgery of Colon & Rectum, One Week, Starting October 18, November 15.
Surgical Pathology Every Two Weeks.

FRACTURES & TRAUMATIC SURGERY—Intensive Course, Two Weeks. Starting October 25.

OBSTETRICS—Intensive Course, Two Weeks, Starting October 25.

MEDICINE—Intensive Course, Two Weeks, Starting October 11. Personal Course in Gastroscopy, Two Weeks, Starting November 8.
Gastroenterology, Two Weeks, Starting October 25.
Hematology, One Week, Starting October 4.

DERMATOLOGY—Formal Course, Two Weeks, Starting October 4. Clinical Course Every Two Weeks.

OPHTHALMOLOGY—Refraction Methods, Four Weeks, Starting October 11.
Ocular Fundus Diseases, One Week, Starting November 15.

OTOLARYNGOLOGY—Intensive Course, Two Weeks, Starting October 18.

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County Society News

HARRISON

Nearly one hundred doctors from the central West Virginia area attended the tri-county (Harrison, Marion, and Monongalia) medical meeting at Clarksburg, September 2. Dr. W. H. Allman, president of the Harrison County Society, presided as chairman.

Dr. L. Fernald Foster, of Bay City, Michigan, secretary of the Michigan State Medical Society, was the guest speaker. His subject was, "Medical Public Relations." He discussed public relations as they should be practiced by doctors, and presented an overall picture of his state society program, which includes the use of radio, motion pictures, and newspaper publicity.

—J. F. McCUSKEY, M. D.,
Secretary.

* * * *

KANAWHA

Dr. Bayard Carter, chairman of the department of obstetrics and gynecology at Duke University, Durham, North Carolina, was the guest speaker at the September meeting of Kanawha Medical Society, held September 14, at the Hotel Daniel Boone, in Charleston. His subject was, "Adenocarcinoma of the Cervix and the Cervical Stump."

The speaker stressed the importance of early diagnosis, to be followed by early treatment so as to afford the patient the best possible chance for survival.

Dr. Paul H. Revercomb, the president, presided at the meeting, which was attended by over sixty members.

Over one hundred members of Kanawha Medical Society attended the annual outing at Edgewood Country Club, in Charleston, on August 4. A buffet supper was served following an afternoon of golf, tennis and other outdoor activities.

—JOHN W. HASH, M. D.,
Secretary.

VAN METER PRIZE AWARD

The American Goiter Association again offers the Van Meter Prize Award of Three Hundred Dollars and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The award will be made at the annual meeting of the Association which will be held at the Hotel Loraine, in Madison, Wisconsin, May 26-28, 1949, providing essays of sufficient merit are presented in competition.

The competing essays may cover either clinical or research investigations; should not exceed three thousand words in length; must be presented in English; and a typewritten double spaced copy sent to the Corresponding Secretary, Dr. T. C. Davidson, 207 Doctors Building, Atlanta 3, Georgia, not later than March 15, 1949.

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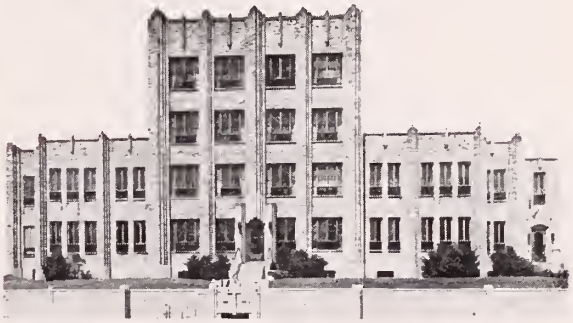

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Obituaries

DR. JOHN SAMUEL SHAFFER, M. D.

Dr. John Samuel Shaffer, 76, of Cannelton, died September 12, at his home in that city following a brief illness. Doctor Shaffer was born in Xenia, Ohio. After graduating from Ohio Wesleyan and Wittenberg Colleges, he enrolled at Miami Medical College, Cincinnati, Ohio, receiving his M. D. degree there in 1902.

After serving as a member of the Ohio National Guard during the Spanish American War, he located at Montgomery and served as assistant to the late Drs. S. K. Owens and Lawrence Montgomery. He moved to Cannelton in 1904, where he engaged in industrial practice until his retirement in 1934. He served overseas with the Medical Corps of the Army during World War I, and was honorably discharged with the rank of major. He served as colonel in the United States Army Reserve until 1940.

Doctor Shaffer was an honorary lifetime member of the Fayette County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

He is survived by his widow, Mrs. Christabel (Ort) Shaffer, and a daughter, Mrs. Thomas H. Hovenden, of New Canaan, Connecticut.

* * * *

WILLIAM EVERETT WHITESIDE, M. D.

Dr. William Everett Whiteside, 72, of Parsons, died August 30, 1948, at his home in that city. Death was attributed to heart disease. He had been in ill health for several months but had continued to practice until shortly before his death.

Doctor Whiteside was born at Long Bottom, Ohio. He received his M. D. degree in 1906 at the Hospital College of Medicine, Louisville, Kentucky, after which he took postgraduate work at Columbia University. After practicing at Fenwick, West Union, Page, and Peel Tree, he located at Parsons in 1925, where he continued in practice until his death.

He was an honorary lifetime member of the Barbour-Randolph-Tucker Medical Society, the West Virginia State Medical Association, and the American Medical Association, and had served as president of his local society. He served as member of the Army medical corps in World War I, being assigned to the 37th Engineers. He is survived by his widow, Mrs. Alvira (Pittman) Whiteside; a sister, Mrs. M. B. Stewart, of Morgantown; and a brother, Dr. C. T. Whiteside, of Kayford.

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VITAL STATISTICS REPORT

The number of deaths, 1,267, reported to the state department of health for July, 1948, reached a new low for the year. In comparison, the total number of deaths, 9,971, reported for the year through July, 1948, was higher than the total of 9,813 reported for the same period in 1947.

During the month of July, heart disease accounted for 317 deaths, cancer, 152, and accidents 123. These were the three leading causes of death in that month.

Poliomyelitis was responsible for the death of two persons in the state in July. Kanawha County, during the month, reported one death each from tularemia and Rocky Mountain spotted fever. These were the first deaths from these diseases reported in the state this year. Two deaths from spinal meningitis were also reported, one each from Kanawha and Mercer counties.

Premature deaths dropped from 62 in July, 1947, to 54 for the corresponding month this year. Kanawha County led with eight, while Cabell, Harrison, Ohio and McDowell counties reported four each.

The number of infant deaths, 137, in July, was the lowest since January, 1948, with a rate of 29.7 per 1,000 live births. This compares with a rate of 36.2 for July, 1947.

The number of births, 4,609, reported for July was higher than any other month this year. However, the 1948 trend is lower than last year. In July, 1947, 4,866 births were reported. For the first seven months of 1947 there were 29,703 births as compared with 27,060 for the same period in 1948.

Rocky Mountain spotted fever, according to the number of cases reported for July, indicates a slight increase in the incidence of this disease. There were six cases reported for the month as against one for July, 1947, and a total of seven cases for that year.

The number of cases of poliomyelitis reported for July, 1948, was 15, compared with four for the same period last year. Meningitis cases reported totaled twelve, as compared with two cases for the same month last year.

W. VA. TB AND HEALTH ASSOCIATION ELECTS

Dr. W. L. Cooke, of Charleston, was elected president of the West Virginia Tuberculosis and Health Association at the annual meeting at Huntington Sept. 16. He succeeds Dr. W. P. Bittinger. of Summerlee. Mr. W. A. Smith, of Parkersburg, was named vice president, and Dr. J. L. Patterson, of Logan, and Mr. Robt. C. Hawkins, of Charleston, were reelected secretary and treasurer, respectively.

Mr. Edmund P. Wells, of Charleston, continues as executive secretary, and Miss Gail White as administrative assistant.

Over a hundred representatives from over the state attended the two-day session. Mr. James G. Stone, NTA director of program development, was the guest speaker at the annual banquet.

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SURGERY IN INFANCY AND EARLY CHILDHOOD*

By BERT BRADFORD, Jr., M. D.,
Charleston, West Virginia

The purpose of this paper is to discuss the more common abdominal lesions requiring surgery in infancy and early childhood. To anyone interested in surgery of early life, it is apparent that the child is subject to most of the diseases of the adult and to many other conditions not found in the adult.

It is, therefore, pertinent to consider certain essential basic requirements in the proper surgical treatment of these patients. They are: the necessity of the conservation of body heat, adequate fluid and electrolyte balance, skill and delicacy in handling tissues, hemostasis, and good anesthesia. The cooperation between the pediatrician and the surgeon cannot be over-stressed. Adequate preoperative care and postoperative treatment have been chiefly responsible in recent years for the lowered mortality rate of these patients. Few surgeons are familiar with the feeding problems and requirements for proper nutrition and consequently must depend upon the pediatrician for advice and counsel. Although urgent surgery is frequently necessary to sustain life, emergency operation without proper preoperative preparation is seldom, if ever, warranted and usually leads to unsatisfactory results. With adequate preoperative care, meticulous and gentle surgery, infants withstand major surgery as well as adults. Malnutrition is commonly observed in these patients as a result of continued vomiting. There is a lowering of the plasma and tissue proteins associated with vitamin deficiency and electrolyte imbalance. The surgeon who attempts to operate under such adverse conditions courts disaster. Studies of nitrogen metabolism have shown that nitrogen administered orally in the form of amino acids is utilized more effectively than it is when administered intravenously.[1,2]

The advantage of transverse incisions in intra-abdominal surgery in early life as well as in adults, has been well established. Better exposure with less retraction and trauma to the soft tissues is assured. Severance of both recti muscles is frequently done. In my experience, the incisions close more easily and with less tension. The incidence of postoperative hernia is less than with the conventional vertical incisions. Interrupted sutures of fine silk are used to close the abdominal incisions except the peritoneum, in which a running suture of fine catgut is used.

Time and patience are essential in diagnosing surgical diseases in early life. A careful history from the mother is a prerequisite. The examining physician must gain the confidence of the patient. Any part of the examination which may cause discomfort is done last. Light palpation of the abdomen frequently gives more information than does deep and painful palpation. It is useless to attempt abdominal palpation while the infant is crying. Feeding of a milk formula or sterile water will relax the abdominal wall and give the best conditions for satisfactory examination. No attempt should be made to palpate any abdomen

*Oration in Surgery, presented before the 81st Annual Meeting of the West Virginia State Medical Association, at Huntington, May 12, 1948.

with a cold hand because of the discomfort and associated muscle spasm. Repeated examinations at intervals will frequently aid the surgeon in making the correct diagnosis.

Digital examination of the rectum should be done in every suspected acute abdomen. Appendicitis, abscesses, intussusception and rectal polyps may be overlooked unless this procedure is carried out. It is regrettable that the rectal examination is not a routine procedure in every patient suspected of having an acute abdominal condition.

In dealing with congenital anomalies in infants one should not overlook the possibility of multiple defects being present elsewhere in the body.

Advances in the field of anesthesia during World War II have aided materially in the safe conduct of the patient during operation. Unfortunately, in infants and small children the borders between the stage of tolerance and that of intoxication lie close together, requiring the services of a skilled anesthetist. In most instances drop ether is the preferred anesthetic. In pyloric stenosis, local anesthesia, using novocaine (¼ per cent), has been found to be satisfactory in the majority of cases.

Infants tolerate shock poorly. The loss of 25 cc. of blood in an infant is equivalent to 500 cc. in an adult. The loss of blood should be immediately corrected by transfusion. An indwelling cannula in an ankle vein for the administration of blood and fluids is an added safeguard for patients undergoing extensive surgery.

ACUTE APPENDICITIS

Acute appendicitis is the most common lesion requiring intra-abdominal surgery in childhood. It is of great importance because of its frequency and because it continues to be responsible for many preventable deaths. Appendicitis occurs rarely in the first year of life, infrequently in the second, but from then on it becomes common. Ladd[3] states that in children under 10 years of age, only pneumonia and accidents exceed appendicitis as a cause of death. Statistics from our own state health department show that appendicitis ranks ninth as the cause of death in children over one year of age. Although the general death rate of this age group has continued to decline, the death rate from appendicitis has not declined accordingly. The untreated disease runs a more rapid and a deadlier course in the younger age group, thus, somewhat different therapeutic principles must be used. The reason for the rapid course is that the defense mechanism for localization is poor as a result of the underdeveloped omentum and the increased mobility of the cecum.

Difficulty in recognizing acute appendicitis in young children has been emphasized, but it usually is possible to identify the condition before peritoneal involvement has occurred. Certainly the triad of abdominal pain, vomiting and slight fever must be considered as appendicitis until proved otherwise. The position of the appendix in children is variable and often quite different from the usual adult location. This fact should be remembered when the point of maximum tenderness is on the left side. A retrocecal appendix may be indicated by frequent loose or mucus stools and may give none of the signs of peritoneal irritation. If, at operation, the appendix shows no abnormal changes, the terminal three feet of the ileum should be examined for a possible Meckel's diverticulitis or regional ileitis. The difficulty of establishing an early diagnosis of appendicitis in young children is shown by Scott and Ware[4] who point out that in children under six years of age perforation was encountered more than twice as often as simple appendicitis without rupture. That acute appendicitis may occur during the course of other diseases, especially upper respiratory infections, is attested by many authors.[5,6,7,8] The appendix of a child is larger in relation to the size of the abdominal cavity than is that of the adult, and the mesoappendix is correspondingly longer and less fixed. Therefore, the maximal point of tenderness may vary more in location than it does in the adult. The most common conditions which offer difficulties in differential diagnosis are bronchopneumonia, pyelitis, idiopathic peritonitis, acute mesenteric adenitis, regional enteritis and volvulus.

The continued use of cathartics for children with abdominal pain has, no doubt, greatly increased the number of appendiceal perforations. More emphasis is needed to impress upon the laity the harmful effects of giving a cathartic to children with abdominal pain. Sperling and Myrick[8] report that 47 per cent of their patients dying of appendicitis had taken cathartics prior to admission.

Patients seen late in the illness, who are toxic and show evidence of spreading peritonitis, present a difficult problem and no set rules as to treatment can be stated. Supportive measures are instituted for a few hours or until one is confident that the patient can tolerate surgery. The McBurney incision is used almost routinely. If at all possible the appendix should be removed even

though a definite, localized abscess is present. Intraperitoneal drains are not used except in cases in which a localized abscess is present. If perforation has occurred, a drain is placed in the incision down to the peritoneum.

In order to lower the mortality rate of acute appendicitis, early diagnosis and prompt operative intervention are necessary. Adequate surgery, the judicious use of streptomycin, repeated blood transfusions and penicillin in large doses will aid materially in cases that are complicated by peritonitis.

INTUSSUSCEPTION

Intussusception is second only to appendicitis as a cause of the acute surgical abdomen in infants and children. The generally high mortality rates reported in the literature indicate the need for more widespread knowledge of this condition and of its treatment. In less than 5 per cent of the cases in the early age group can any demonstrable etiologic agent such as polyp, Meckel's diverticulum, fibroma or lipoma be found. Intussusception may follow an attack of acute enteritis. It occurs most often between the ages of four and ten months. From the anatomic standpoint, it can involve any segment of the bowel However, the ileocolic type is found in 80 per cent of the cases. As a rule, these infants are quite healthy and well nourished.

Recurrent, colicky abdominal pain is an almost universal symptom. Vomiting is an early symptom. The pain is intermittent in character and during the free interval the infant may resume a playful attitude, only to have pain recurring five or ten minutes later. Pallor, sweating, dehydration and shock may appear and increase progressively. Oberhelman and Condon[12] report shock or impending shock in over 30 per cent of their cases. A mass, which is often described as sausage-shaped, can be palpated in most of the cases. Rectal examination may detect blood and mucus and occasionally the advancing portion of the bowel may be palpated in the rectal lumen. In questionable cases a barium enema will substantiate the diagnosis. Many cases of intussusception are reduced satisfactorily during a routine diagnostic study with a barium enema. Ravitch,[13] at Johns Hopkins Hospital, reports 27 cases in which barium enemas were used in an effort to reduce intussusception. In 20 cases, reduction was complete. In the remaining 7 cases, surgery was carried out. There were no deaths in this group. Ladd[3] does not believe in reduction by barium enema since he feels that valuable time is lost and that pathology such as incomplete reduction, perforation, diverticulum, or benign tumor may be overlooked.

Early diagnosis and proper treatment will aid materially in lowering the high mortality rate associated with intussusception. Published surgical mortality rates range between 20 and 45 per cent.

One should never make the operative incision over the mass. Exposure of the right lower quadrant of the abdomen is essential since practically all of the pathology can be corrected more easily through this approach. The surgeon must take into account the extreme friability of the hemorrhagic and damaged intestine. Gentleness is absolutely necessary. The intussusception is reduced by taxis or "milking back" of the invaginated portion, beginning at the distal end. Attempts to pull out the intussusception may lead to further damage and probable tearing of the intestine resulting in contamination of the peritoneal cavity. With persistence and patience, 95 per cent of the cases of intussusception can be manually reduced. Following reduction, the gut should be carefully examined as to viability. If the discoloration fades under warm, moist, saline soaks and if peristalsis is seen in the involved segment, one may assume that the intestine is viable. If reduction cannot be accomplished, or if there is questionable viability after 20 minutes of applying warm compresses, resection should be carried out. Primary anastomosis appears to be the procedure of choice, when resection is necessary. If this procedure is not advisable, due to the critical condition of the patient, a Mikulicz type of resection may be done with establishment of intestinal continuity in four or five days to prevent the loss of succus entericus.

Elective surgery should not be carried out in operating for intussusception. Only when a Meckel's diverticulum or an appendix is gangrenous or a benign tumor is so large that it blocks the intestinal lumen is further surgery indicated. Routine appendectomy or any other opening in the intestinal tract may result in spreading of the infection and further complications.

Procedures advocated to prevent recurrence of the intussusception appear to be of no practical value. Ladd[3] reports a recurrence rate of only 2 per cent in a series of 484 cases.

CONGENITAL HYPERTROPHIC STENOSIS

Congenital hypertrophic pyloric stenosis is the most common condition requiring surgical treatment in the first few months of life. Males are affected in about 85 per cent of cases. Modern

surgical treatment, by means of which a cure can be easily and permanently achieved by a simple operation, is superior to extended medical treatment with the usual uncertain results. Although vomiting does not usually occur before the ninth or tenth day of life, definite well marked pyloric tumors have been found in premature infants and in many infants operated upon for other reasons during the first day or two of life. Prior to 1912, when the operation of pyloromyotomy was adopted following the work of Fredet in 1908 and Ramstedt in 1912, the mortality rate of pyloric stenosis varied from 50 per cent to 75 per cent. Today, with the Fredet-Ramstedt operation in competent hands and with adequate preoperative and postoperative care, the mortality rate has been reduced to 1 or 2 per cent. Donovan[9] reports 245 cases of pyloric stenosis in which operation was performed, with a mortality rate of 0.8 per cent.

The clinical course is uniform in most cases. Vomiting during and after each feeding is always the first symptom. At first it may be just regurgitation. The vomiting becomes forceful and projectile after a few days. The vomitus never contains bile and this is an important point in making the diagnosis. Occasionally, vomiting may occur one to two hours after feedings. The stools become scanty; the infant loses weight and may become extremely dehydrated.

The typical history is helpful in making the diagnosis and palpation of a pyloric tumor is pathognomonic. The tumor is palpable in practically every case and usually is found just to the right of the rectus muscle, midway between the umbilicus and the costal margin. It is best felt while the infant is nursing and especially just after the patient has vomited. Repeated examinations while the abdomen is relaxed may be necessary before the tumor is felt. A palpable tumor was present in 98 per cent of the cases reported by Ladd.[3] However, in one case recently seen repeated attempts were made to palpate a pyloric tumor without success. When this infant was operated upon, a well defined tumor was found under the liver margin. The pylorus had been anchored in this position by peritoneal bands. Gastric peristaltic waves are always present and are best seen when the stomach is distended.

Roentgenologic examinations usually are not necessary in establishing the diagnosis but may be helpful in atypical cases. If barium is used, it should be immediately removed with a small Levine tube. The possibility of stenosis, atresia or an incomplete rotation of the cecum must be kept in mind. The last named may cause pressure on the third portion of the duodenum, producing obstruction.

One to three days' preparation with parenteral fluids usually is sufficient to obtain proper hydration. In general, one should maintain a fluid intake of 2½ to 3 ounces per pound of body weight. This is best accomplished by subcutaneous infusions of Hartman's Solution or saline with added glucose 15 cc. per pound of body weight, twice daily. If vomiting has been protracted, blood or plasma 10 cc. per pound of body weight should be given during this preoperative period as some of the feedings will be absorbed. Equal parts of Parentemine and 10 per cent glucose are retained in a fair proportion of cases and may be preferable to a milk formula. The stomach is emptied through a small Levine tube just before operation and the tube left in place during surgery. The surgeon must keep in mind that this is not an emergency operation.

The usual Fredet-Ramstedt operative procedure is carried out in all cases. Less troublesome bleeding is encountered if the pyloric incision is made on the relatively avascular superoanterior surface of the pyloric tumor. The duodenum may be inadvertently opened if extreme care is not used. The gastric tube is removed after the patient recovers from the anesthetic. Feedings should be withheld for six hours following surgery. Feedings for the first twenty-four hours should consist only of sterile water with 5 per cent glucose. Faber[10] has shown that the stomach does not empty for eight to twenty-four hours following the Ramstedt operation. After twenty-four hours the milk formula should be increased slowly until the infant is receiving an adequate caloric intake at the end of seventy-two hours.

Postoperative complications are rare. Pulmonary infections are almost unheard of.

The infant may continue to regurgitate a small amount of its feedings for the first few days. Passage of a Levine tube usually will be all that is necessary to alleviate this condition. Parenteral fluids are continued for the first three postoperative days.

Donovan[9] reports two cases operated on by him in adult life, in both of which gastroenterostomies had been done in infancy. In both cases, the pyloric tumor was still present and looked exactly as it had in infancy. Wollstein has made a study of healing after the Fredet-Ramstedt operation, based upon a study of material from 23 autopsies performed from twenty-four hours

to two years after operation. The incision in the pylorus was healed in nine days. The stomach returned to normal size in one month and the gap between the cut ends of the muscle coats had practically disappeared in six weeks.

Ladd[3] and Donovan,[9] in their large series of follow-up cases, have had no late gastric complications following the Fredet-Ramstedt operation. Bendix and Necheles[11] followed 17 cases in which the Fredet-Ramstedt operation was done in infancy. The average age of the patients at the time of the follow-up was 21 years. In three of these patients signs of duodenal ulcer developed. The authors concluded that hypertrophic pyloric stenosis and peptic ulcer resulted from an imbalance of the autonomic nervous system.

INGUINAL HERNIA

Inguinal hernia is a common malady in infants and there are many different ideas as to its proper treatment. This type of hernia is practically always indirect and represents a persistence of the fetal condition, disclosing an out-pouching of the peritoneum into the inguinal canal. Defective closure of the processus vaginalis appears to be the chief predisposing factor. The hernia is most commonly found during the second or third month of life. Due to the underdevelopment of the omentum, only small intestine is found in the hernial sacs. The majority of these hernias are on the right side. Thorndike and Ferguson[14] report an incidence of incarceration in 6 per cent of the inguinal hernia cases seen in the Boston Children's Hospital. As a general rule, few symptoms are noted in infants until strangulation occurs, even though a large hernial sac is present. In fact, symptoms of pain and discomfort are noted more often in cases with smaller hernial rings.

In diagnosing hernia in infancy, the mother usually states that she has noticed a bulge in the inguinal area while the infant is straining. Inspection ordinarily will disclose a bulge, especially while the infant is crying. Attempts to palpate the inguinal rings are quite painful to small children and are rarely satisfactory. If one palpates gently with the index finger over the internal inguinal ring, some thickening can be noted provided the hernia has been present for any length of time. The child, if large enough, is examined in the erect position. Transillumination is done in all cases of bulging in the scrotal area to rule out hydrocele. It is not unusual for a hydrocele to be found in association with a congenital inguinal hernia. An undescended testicle is not infrequently found and care should be always exercised in palpating both testicles in the examination for inguinal hernia.

The truss has a distinct field of usefulness, but it is seldom, if ever, curative. It is used as a palliative measure to prevent incarceration during periods of feeding difficulties or illness. The yarn truss is the only satisfactory type for infants. In some cases the yarn truss is unsatisfactory because the hernia is too large or because of the inaptitude of the parents. In such cases an operation should be performed regardless of age. Many small inguinal hernias will disappear during the first six months of life. Those that persist after that time will, in most instances, require surgery. Ladd[15] believes that rubber, spring, or leather appliances should be dispensed with since they may exert too much pressure on the spermatic cord.

If the hernia is not too large and can be adequately controlled by conservative measures, surgery may be delayed until after the first year of life.

The operation best suited to infants and young children is that advocated by Ferguson, of which there are many modifications. Employing this method, the hernial sac is dissected out and ligated with excision of its excess portion. The structures are approximated, using the Ferguson technic, leaving the spermatic cord in its normal position. Transplantation of the cord, as advocated by Bassini and Halsted, may cause increased pressure on the spermatic vessels and ultimate atrophy of the testicle. It also tends to shorten the cord and elevate the testicle.

A piece of oil silk, or any other type of waterproof material, is placed over the regular dressing. Diapers are dispensed with until the wound is completely healed.

The results of surgery in inguinal hernia are excellent. Ladd[3] reports 10 recurrences in 4,133 patients who had undergone surgery in the Boston Children's Hospital.

ANOMALIES OF THE SMALL INTESTINE

Acute intestinal obstruction in the newborn is sometimes produced by atresia or by stenosis of the small intestine. Atresia is a congenital defect causing complete obstruction while stenosis, also congenital in origin, causes incomplete obstruction. During the first few months of fetal life, the intestinal lumen is changed to a solid cord as a result of hyperplasia of the epithelium. The intestinal lumen is later reestablished at the end of the third month. Atresia or stenosis is the result of an arrest of this recanalization of the in-

testine during fetal life. These congenital anomalies may occur at any point in the small intestine, but are most commonly found in the ileum. They are found less frequently in the duodenum and still more seldom in the jejunum. Atresia may be multiple whereas stenosis nearly always is single.

The symptoms are more pronounced in atresia as this condition is incompatible with life. These patients rarely live longer than a week, if not operated upon. Infants with stenosis may live for days, months, or years in fair health, depending upon the degree of obstruction.

Stenosis should be suspected in any infant or child with repeated vomiting and abdominal distention. The chief symptom is vomiting which begins almost immediately after birth. The vomitus is bile stained and in this way the diagnosis is readily differentiated from Pyloric stenosis. In very rare instances the defect is proximal to the ampulla of Vater and in such cases no bile will be seen in the vomitus. Abdominal distention depends upon the location of the obstruction. Those in the ileum show a progressive distention, whereas in lesions of the duodenum, the lower abdomen is relatively flat. A roentgenogram taken without the administration of barium is of value in confirming the diagnosis. Barium may result in a further block of the small lumen of the intestine below the area of atresia after an anastomosis has been performed. Failure to find keratinized cells in the stools, as pointed out by Farber,[16] will aid in confirming the diagnosis of atresia.

In patients with atresia, operation should be delayed only long enough to overcome dehydration and correct the electrolyte imbalance. Operations carried out during the first days carry a better prognosis than those delayed.

Adequate exposure is essential. Evisceration of the intestines is advantageous in quickly finding the site of obstruction, also in ruling out any other possible congenital defects. A side-to-side anastomosis between the proximal and distal loops of bowel gives the best results. Gastroenterostomy is not done unless the obstruction is in the first portion of the duodenum. Technical difficulties usually are encountered due to the marked disparity in the size of the loops which are anastomosed. It is occasionally wise to aspirate air from the distended proximal loop and inject air or saline into the collapsed distal segment prior to the anastomosis. Enterostomy alone is a poor surgical procedure due to the great loss of intestinal fluids which loss cannot be tolerated by infants. If enterostomy is done it must be followed in three to four days by an anastomosis with closure of the intestinal fistula.[17]

The mortality rate of atresia is of course higher than that of stenosis. Those cases with ileal involvement have a higher mortality rate than those in which the duodenum is involved. Ladd,[15] in 1943, reported 87 cases of atresia and stenosis with 63 deaths and 24 recoveries. Miller,[18] in 1947, reported 11 cases of duodenal atresia with only 4 deaths.

Incomplete rotation of the cecum with obstruction of the duodenum, due to peritoneal bands, is not too rare in newly born infants. This condition frequently is associated with a midgut volvulus. The volvulus occurs in a clockwise manner. At operation it is necessary to reduce the volvulus in a counter clockwise fashion and sever the peritoneal bands between the cecum and the right lateral peritoneal wall.[19] Not infrequently one may overlook the obstructing peritoneal bands, believing that reduction of the volvulus is all that is necessary. Unless both conditions are corrected vomiting will persist.

In conclusion, I should like to further emphasize the importance of early diagnosis and management of acute surgical lesions of the abdomen in infants and children. Reestablishing and maintaining fluid and electrolyte balance is paramount in successfully carrying these patients through major surgical procedures. A plea is made for closer cooperation between the surgeon and the referring physician who sees these patients early.

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PREVENTIVE PEDIATRICS

It seems unlikely that the supply of pediatricians will increase sufficiently to furnish medical care to all the children. To do so would require tripling or even quadrupling the present number.

If preventive care is to be expected in rural areas and to the large number of children who live in cities not under the care of pediatricians the responsibility must fall on the shoulders of the general practitioners. It immediately follows that if general practitioners are to assume this responsibility there must, first of all, be more of them, and second that there must be increased emphasis placed upon teaching pediatrics in the curricula of our medical schools and in the internship years.

The current movement favoring two-year internships for those physicians going into general practice which would include four to six months' training in pediatrics would appear to be a long step in the right direction. At any rate, if all the children of a community or a state are to receive what we think of as a well-rounded program of medical care it must come about through joint effort on the part of the pediatricians and the general practitioners working cooperatively toward a common goal.—Lee Forrest Hill, M. D., in Rocky Mountain Medical Journal.

THE ART OF PRACTICING MEDICINE

The successful practice of medicine is not in just knowing what laboratory procedure to undertake to make a diagnosis, or what type of operation is necessary, or what drug should be prescribed. These are necessary, but it is just as important to know the patient. Thus his reactions to therapeutics can be better estimated. Here the psychosomatic element plays such an important role in medicine. It is this factor which lays the foundation for confidence, which is absolutely essential to the successful practice of medicine.—W. C. Thomas, M. D., in J. Florida Med. Assn.

THE DIAGNOSIS OF ACUTE POLIOMYELITIS*

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Sir William Osler is credited with having called syphilis the "great imitator" of other diseases. Today as we see this disease bereft of its advanced stages to a great degree by the heavy metals and later by penicillin it does not quite live up to the title it once held. If any other disease can now lay claim to that questionable distinction, it is poliomyelitis. In its acute stages, poliomyelitis presents the clinical aspects of almost any of the acute febrile diseases, from the common cold to acute tuberculous meningitis; in its chronic stage it runs the gamut of the physical findings, extending from congenital deformities to the muscular dystrophies. The very mild, abortive type of case may give few more significant findings than are usually present with the common cold. The severe bulbar cases may, on the other hand, present a terrifying picture of acute cardiorespiratory collapse to alarm the most experienced clinician.

Because of the great variety of clinical findings and the lack of any one or more pathognomonic findings, this disease presents a decided diagnostic enigma to one who does not see many cases. Its many guises give rise to much confusion with regard to its clinical picture. Some texts classify as many as ten different types which overlap one another in their clinical symptomatology. Therefore, for purposes of clarity, only the simplest classification will be considered.

First, there is the healthy carrier of which there are many. Direct contacts of known cases have had the virus found in their stools within a few days of the contact.

Second, there is the abortive type. This type of case seldom comes to the attention of a physician and, if it does, can more easily than not be interpreted as a case of "flu". It is characterized by low grade fever, sore throat, headache and nausea, with possible vomiting accompanied by constipation.

Third, there is acute poliomyelitis without paralysis or the type of case which is seen in paralytic poliomyelitis in its earlier stages before the development of paralysis. Here again is presented a clinical picture which is just a little more severe and more characteristic. In this case will be seen, in addition to the aforementioned findings, the initial indications of central nervous

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system involvement in the form of those signs which indicate increased meningeal irritation. Usually the temperature will reach 102 F. and occasionally higher, with a pulse which is rapid and out of proportion to the tempertaure. This fever persists from four to seven or eight days. During this period severe headache is probably the most common symptom, being present in nearly all cases. Muscle spasm and tenderness are present in this phase, being frequently noted in the cervical extensors and giving rise to a picture simulating meningitis. Abdominal pain may be a factor with either constipation or diarrhea presenting a clinical picture difficult to distinguish from acute appendicitis or acute gastroenteritis. Although actual paralysis may not be present at this stage, beginning involvement of the motor system may be evidenced by muscular twitchings noted in active movement or by actually visible fasciculations in the muscles of a thin individual. Central irritability is further evidenced by hyperactive deep tendon reflexes, the lack of which are so significant as a diagnostic sign in more advanced stages of the disease. Spinal fluid examinations show an early increased cell count, increase in spinal fluid proteins, and increased intraspinal pressure during transitory phases, none of which findings is of any pathognomonic value.

The fourth, or paralytic type, presents any of the aforementioned symptoms and physical signs in addition to paralysis. The interpretation of the term 'paralysis' is one of the most significant features of an accurate diagnosis. It may be a 'paralysis' of a spastic type brought on by the pain elicited on movement of the trunk or extremity. It may be the inability to carry out a certain action normally carried out by a muscle or group of muscles, which action at this time cannot be carried out, not because of an actual paralysis, but because of muscular imbalance or lack of muscular coordination brought about by central irritability within the nervous system. The identification of this type of pseudoparalysis, as such, is important not only from a standpoint of diagnosis but prognosis as well, since muscles so involved show a far greater tendency to normal recovery than a truly paralyzed flaccid muscle. Paralysis usually makes its apperance during the period from the third to the fifth day of the disease but its appearance beyond these extremes is not unusual.

The fifth, or bulbar type, being much less common, will not be discussed in detail in this paper, not because of its lack of importance but because of its relative rarity of occurrence. Sufficient to state, it is characterized by paralytic involvement of the ninth to twelfth cranial nerves as well as the cardiorespiratory centers in the brain stem. Clinically, the condition is characterized by paralysis of the pharynx, larynx, esophagus, tongue and cardiorespiratory center and is manifest by inability to swallow and regurgitation through the nose (particularly of fluids). Speech ability gradually becomes more blurred until completely lost. Coughing is difficult. Cardiorespiratory involvement and failure are characteristic due to other causes and demonstrate a rapid, weak and sometimes irregular pulse accompanied by a continuous fall in blood pressure which in some cases is very rapid.

Last in type is the encephalitic variety. In addition to any of the previously described manifestations, there is present in this type coma of varying degree. The coma may be accompanied by any of the signs of cerebral irritability manifest by increase in deep reflex activity, ankle clonus and a Babinski sign. A positive diagnosis of this condition is difficult even at autopsy in the absence of motor nerve involvement.

Having considered the most significant findings which present themselves to the examiner, we must consider those findings which are rarely, or never, found in poliomyelitis. *Acute upper respiratory infections,* particularly those of a severe nature, often present findings which may on first examination suggest poliomyelitis as a diagnosis. Such infections include influenza, acute tonsillitis, and acute otitis media. Careful examination should exclude these possibilities. Moreover, the relatively high temperatures which accompany these conditions are, as a rule, significantly higher than the moderate elevations present in poliomyelitis. Neither irrationality nor coma is often seen in acute poliomyelitis but both are commonly noted in suppurative meningitis and in the more rarely seen tuberculous meningitis and luetic meningitis. Cerebral accident, diabetes and acute nephritis are also more apt to present this finding. Convulsions, if present, should warn the examiner to seek another diagnosis as they too are very rare in poliomyelitis but are commonly seen in epilepsy, disturbances of acid-base balance accompanying dehydation in young children, tetanus, tetany and in severe febrile reactions. Temperature elevation must be carefully evaluated as noted before. A temperature elevation which is maintained at high levels (above 102 F.), or an irregular tempearture curve with recuring high elevations indicative of septic infection, or a recurrent spiking temperature such as is seen in malaria, undulant fever, or typhoid

should suggest these conditions rather than poliomyelitis. Pain, swelling and local heat are never seen in acute poliomyelitis. Let it be noted here, however, that early focal osteomyelitis situated below heavy muscular structures, particularly in the thigh, and accompanied by the aforementioned pseudoparalysis will fool any but the wary diagnostician.

Pronounced cervical lymphadenitis should first suggest the acute stages of scarlet fever, diphtheria, infectious mononucleosis, peritonsillar abscess and acute tonsillitis. Abdominal tenderness usually indicates an acute abdomen, i.e., appendicitis, gastroenteritis or colitis and, in adult females, pelvic inflammatory disease as well as extraperitoneal lesions such as kidney infections and diaphragmatic pleurisy. The examination should determine whether the pain and soreness are limited to the abdominal musculature. Poliomyelitis involving only the abdominal group of muscles is notably rare.

A survey of cases admitted to The Morris Memorial Hospital for Crippled Children within the past year has prompted the preparation of this paper. A study of the files of cases admitted with the presumptive diagnosis of acute anterior poliomyelitis reveals that in a series of 100 cases, 77 were admitted with the diagnosis of acute anterior poliomyelitis and established as such. Twenty-three admitted with this presumptive diagnosis, however, were subsequently proven to have other diseases.

In our series, 7 of these cases (the largest group) proved to be multiple avitaminosis in children under three years of age, some of which showed the typical joints found in scurvy but none of which showed the characteristic bleeding gums. This would lead us to suspect that joint symptoms are generally an earlier clinical sign than are other types of hemorrhagic involvement. All seven cases showed roentgenologic and clinical evidence of rickets.

Of the remaining 16 cases, 3 were proven to be hysteria, 2 to be acute mono-articular arthritis, 2 acute rheumatic fever and 1 each postmeasles encephalitis, tuberculoma of the brain stem with tuberculous meningitis (fatal case), acute ovarian cyst, acute bronchopneumonia, mumps, psoas abscess, cerebral palsy, acute tonsillitis and pneumonia with pleural effusion.

The great variety shown in the above 23 cases offers ample evidence of the ability of poliomyelitis to imitate a multitude of medical disorders and serves as a challenge to the diagnostic acumen of any practitioner.

SUMMARY

The role of acute anterior poliomyelitis as a diagnostic enigma is presented, together with the most characteristic manifestations of this condition in its various phases. A series of symptoms and signs found in many acute diseases but rarely in poliomyelitis is listed as a precautionery warning suggesting other diagnoses. Last, a series of 100 cases admitted to the Morris Memorial Hospital for Crippled Children with a presumptive diagnosis of acute anterior poliomyelitis is presented together with the established discharge diagnosis, thus showing the multiplicity of imitators of this condition.

CONCLUSIONS

There is no single pathognomonic element of history, symptom, sign, physical finding or laboratory finding which will offer a positive diagnosis of acute anterior poliomyelitis. Accurate history, a thorough physical examination and good clinical judgment must all be combined to make the diagnosis. It may be said, however, that cervical rigidity, muscular weakness or paralysis, muscular soreness and loss of deep tendon reflexes in the involved areas are among the most significant findings which must be sought, together with the lesser pathognomonic findings of moderate temperature elevation, headache, irritability, nausea, vomiting and constipation.

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He who stops being better stops being good.

—Oliver Cromwell.

HYPERTENSION TODAY*

(PART III—LOW (200 MG.) SODIUM DIET)

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The use of the sodium-free diet in the treatment of hypertension is not new but rather has been recently revived. It was applied as early as 1905 by Ambard and Beaujard[1] of Paris, France, and in 1922 by Allen and Sherrell[2] of this country. More recently, it has been advocated by Grollman,[3] also Bryant.[4] Allen[5] in particular has vigorously championed the use of the diet in hypertension for the past twenty-five years. He states, ". . . Various authorities who long denied any effect of salt-free diet have now receded to the position that the benefit is symptomatic and temporary, the judgment in each instance being based on brief, inadequate experience. I am still alone in claiming an influence on the disease itself, different from a mere artificial reduction of blood pressure and often evident in long observation even 'refractory' cases showing little or no change in pressure. This contention that the improvement is specific and that progressiveness is arrested was apparently not established convincingly by our large published statistics, because of the variability of cases. However, it may appear significant that in an experience now covering thirty years and several thousand cases I have never seen an essential hypertension patient who on beginning treatment was free from obvious retinitis, angina, uremia or congestive heart failure and who acquired any of these conditions under continued treatment or ever needed mutilating surgery. These results in cases which were mostly rather advanced on beginning treatment should offer hope for reducing the huge mortality due to hypertension by the rational plan which is used in all other diseases, namely, diagnosis and correct treatment at the earliest possible stage. This problem and mortality are important enough to justify placing on record this new issue of accuracy between an individual declaration and the opposition of all the reputed authorities."

Grollman and Harrison,[6] working with both experimentally produced hypertension in animals and a small series of hypertension patients, obtained successful results in their patients by using less than 1 Gm. of sodium chloride per day and a 2,000 calorie diet. They express the opinion that the beneficial effects of the rice diet are produced by its low sodium chloride content.

In my series of 21 cases the Grollman diet was first used, but during the past eleven months I have used exclusively the low sodium forced fluid diet recommended by Bryant and Blecher.[7] They report their results in 100 patients who were placed on a diet of 2,200 calories containing approximately 200 mg. of sodium, 2.2 Gm. of potassium, 70 Gm. of protein, 80 to 175 Gm. of fat, and 130 to 230 Gm. of carbohydrate, and vitamin supplements for periods varying from several weeks to twelve months. A daily fluid intake of 3 litres was maintained. All were outpatients. The blood pressure was taken by one observer usually at the same time of day, with the subject reclining, sitting, and standing. In no case was the blood pressure below 170 systolic and 100 diastolic previous to treatment. Medical and dietary checks ordinarily were made once or twice a month. There was a significant drop in the systolic pressure to 150 or less in approximately 20 per cent of patients, and a lowering of the diastolic pressure to 95 or less in an additional 15 per cent. A number of the patients who improved on this regimen had failed to respond satisfactorily to bilateral supradiaphragmatic splanchnicectomy and lower dorsal sympathetic ganglionectomy performed previously. The majority with symptoms typical of essential hypertension and hypertensive heart disease showed moderate improvement or were completely relieved of their discomfort. In most of those with angina pectoris the frequency and severity of the seizures were diminished. In all cases in which it was utilized, orthodiography demonstrated definite and progressive decrease in the size of the heart, if enlarged; the inverted T waves frequently seen in hypertensive heart disease became upright in some cases. Papilledema diminished. Peripheral edema and pulmonary congestion invariably disappeared. The relief of symptoms and the objective changes just described were not uniformly associated with a significant fall in the blood pressure. Several patients who originally displayed papilledema and moderately severe heart failure have been followed from six months to one year, have become symptom-free, have shown a decrease in heart size, and a definite fall in blood pressure. The blood pressure has not, however, reached a normal level.

Grollman[8] observes that contrary to the experiences of others the older patients with hypertension of long standing have experienced a more striking drop in blood pressure than have the younger individuals.

Preliminary studies suggest that the results obtained by treating essential hypertension pa-

*This is the third and last of a series of three papers on hypertension prepared for publication in The Journal. Parts I and II appeared, respectively, in the September and October, 1948, issues of The Journal.

tients with a diet low in sodium may prove to be more satisfactory than those achieved by surgical means. This is particularly true in patients with very advanced heart and eyeground changes. The response seems to be similar in degree to that observed by Kempner who uses drastic restriction of fluid (700 to 1,000 cc.), protein (20 Gm.), fat (5 Gm.), as well as sodium (200 mg.), thus suggesting that his results, as previously pointed out by Grollman,[9] may be due primarily to sodium restriction.

These observations confirm the earlier findings of Allen and Sherrell[10] of the value of the sodium-free diet in the treatment of arterial hypertension, and the later observations of Shemm[11] in the management of heart failure. It should be emphasized, however, *that failure may be expected unless the strictest cooperation and complete understanding over a long period of time exist between patient, dietitian and physician* (italics mine).

It is suggested that rigid restriction of sodium seems to have a definite place at the present time in the management of hypertensive vascular disease. These observations, in addition, may have a more important bearing on the pathogenesis of this condition.

Of my 21 patients on the sodium-free diet 14, or 66 per cent, had good results (objective improvement as evidenced by lowering of blood pressure, urinary changes, electrocardiographic reversals, visual improvement, et cetera; 4, or 19 per cent, had some subjective improvement with no appreciable objective changes; 3, or 14 per cent, were not benefited at all. Most of these patients were suffering from moderately severe hypertension and it is only fair to point out that the earlier use of this diet may further enhance its value.

The low sodium diet has a far more practical use than the rice diet since patients do not object to it too strenuously. My procedure has been to use it on (1) hypertension patients who do not show marked secondary renal involvement as evidenced by a poor phenolsulphonphthalein test, low Fishberg concentration test, elevated non-protein nitrogen test, granular casts in the urine, or severe retinopathy, (2) patients who steadfastly refuse to try the rice diet, and (3) patients who have been on the strict or modified rice diet for a sufficient period of time (as evidenced by the objective improvements previously mentioned) to warrant trying a change.

Five cases illustrating the low sodium diet follow:

Case 1.—Mr. E. P. W., white, age 43, was first seen Dec. 1, 1947, complaining of occipital headaches, dizziness, and nose bleeds. He had been advised the previous week to undergo sympathectomy for the relief of hypertension which was of six years' duration.

His family history was significant in that there were numerous instances of hypertension and coronary disease.

Physical examination showed his weight to be 179 pounds, his blood pressure 218 systolic and 130 diastolic, with grade I fundi showing a marked degree of spasm. There were no hemorrhages or exudates. The Gothlin index was 30, the phenolsulphonphthalein test at the end of fifteen minutes was 35 per cent, the Fishberg concentration test was normal and the electrocardiogram was normal. Due to the fact that this man showed no serious secondary kidney impairment or retinal disease, he was put on a sodium-free diet, rutin 20 mg. three times a day and nicotinic acid 20 mg. three times a day. He was given mercupurin 1 cc. intravenously every fifth day. On Dec. 15 (in approximately 2 weeks) his weight was 176½ pounds, his blood pressure 168 systolic and 98 diastolic and he was feeling considerably improved. On Jan. 7, 1948, his weight was 177½, his blood pressure 158 systolic and 88 diastolic and the urine chlorides 90 mg. per 1,000 cc. of urine. Since then he has been seen once a week and his blood pressure has varied between 150 to 158 systolic and 88 to 92 diastolic. On his last visit, Feb. 10, his blood pressure was 148 systolic and 88 diastolic, the urine chlorides 110 mg. per 1,000 cc. of urine.

Case 2.—Mrs. L. N., white, female, age 57, was first seen May 5, 1947. She was known to have had hypertension for at least ten years and at one time had been thought to have a pituitary gland tumor. She was seen by Dr. C. C. Coleman of Richmond about eight years previously and it was his opinion that no pituitary gland tumor was present. At the time she consulted me her blood pressure was 210 systolic and 110 diastolic, the heart markedly enlarged and there was a systolic murmur grade 3, and a short diastolic murmur grade 2 in the fourth intercostal space on the left. The diastolic murmur probably was of the Austin Flint type. Orthodiagraphic study revealed a very prominent enlargement of the left ventricle of the heart, the transverse diameter of the heart being 18 cm., the transverse diameter of the chest 32 cm. An electrocardiogram showed a diphasic T_1, flat T_2, and left axis deviation of minus 31. A specimen of the patient's blood sent to the Laboratory for the Study of Hypertension at the

University of Pennsylvania was reported positive for the antidiuretic hormone and the gonadotropic hormone.

This patient has been treated with the low sodium diet and injections of pitressin tannate in oil, the latter therapy being given in accordance with the recommendations of Griffith and Padis[12] to counteract the overactive pituitary gland. She has been under constant observation since May 1947, to the present time (August 1948) and Since Sept. 1947, her blood pressure has ranged between 140 systolic and 72 and 86 diastolic. For the past several months the patient has been on the diet recommended by Bryant and Blecher. The hormone studies gave a negative reaction Oct. 21, 1947. The subjective relief obtained by this patient was striking.

Case 3.—Mrs. W. K., white, age 60, who, according to her medical history, has had marked hypertension for at least five years, was first seen Dec. 8, 1947, with complaints of marked hypertensive encephalopathy. The blood pressure was 220 systolic and 130 diastolic, with fundi grade I, Gothlin index 106. This patient also had an overactive pituitary gland as evidenced by a positive assay at the University of Pennsylvania. She has been receiving injections of mercupurin each week along with pitressin tannate in oil, and when last seen, Sept. 13, 198, the blood pressure was 130 systolic and 70 diastolic, with almost complete relief of original symptoms.

Case 4.—Mr. J. B., white, age 28, was first seen Dec. 31, 1946, complaining of 'fullness' in the head, also dizziness. This man's hypertension had been discovered at age 20 when he had been examined (and rejected) for military service. His father and mother had hypertension as did one brother. The blood pressure was 186 systolic and 110 diastolic, with normal physical findings except that an electrocardiogram showed left exis deviation minus 35. A bio-assay for antidiuretic hormone, carried out at the University of Pennsylvania, Jan. 29, 1947, was positive. The patient was given a course of pitressin tannate in oil and a low sodium diet. On completion of the injections the blood was rechecked May 17, 1947, and was negative for antidiuretic hormone. The blood pressure April 22, 1947, was 128 systolic and 80 diastolic; on May 10, 1947, 132 systolic and 82 diastolic; on Oct. 11, 1947, when last seen, the blood pressure was 126 systolic and 72 diastolic. Follow-up by means of a conversation with the patient's wife, Feb. 13, 1948, revealed that this man has been actively engaged in his work and has had no untoward symptoms since the completion of therapy which was begun more than one year ago. The patient was seen again Feb. 23, 1948 (14 months after starting treatment), when he stated that he had been employed as a government agent working under considerable strain. The blood pressure on this date was 130 systolic and 80 diastolic. He stated that for the first time within the past ten years he had been able to work as he is at the present time without elevating his blood pressure and without noticing subjective symptoms such as occipital headache, et cetera.

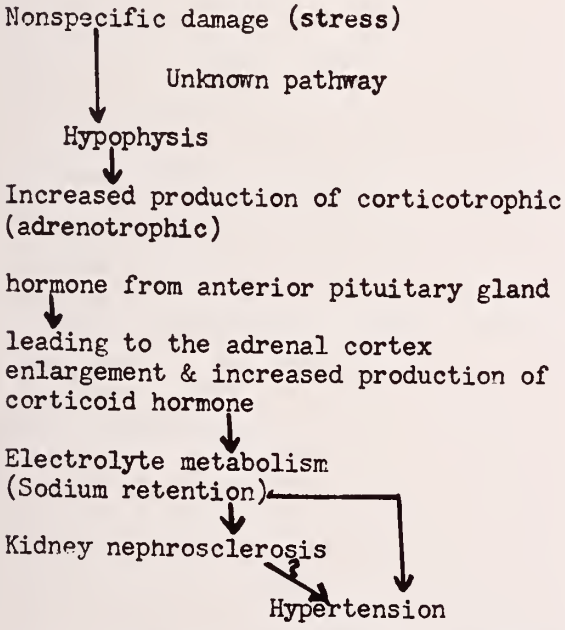
Case 5.—Mr. L. H., white, age 51, druggist, was seen Jan. 20, 1948, complaining of precordial distress, fatigue and occipital headaches. The past history was significant in that he had had a cerebral hemorrhage on the right side in 1946 at which time his blood pressure was said to have been 240 systolic and 160 diastrolic. He had been on potassium thiocyanate therapy for the past year without beneficial results. Hi sblood pressure at the time of my examination was 230 systolic and 138 diastolic. Examination of the fundi revealed grade II retinosclerosis and the heart was enlarged on both physical examination and orthodiagraphic study. The electrocardiogram showed inverted T_1 and T_4 waves. The Gothlin index was 32. The phenolsulphonphthalein test was normal. The bio-assay for antidiuretic hormone was positive. Therapy was (1) sodium-free (200 mg.) diet, (2) rutin 20 mg. three times a day, (3) injection of pitressin tannate in oil and (4) weekly injections of mercupurin as indicated by urine chloride studies. He was last seen August 12, 1948, at which time his blood pressure was 128 systolic and 82 diastolic, with complete relief of subjective complaints and slight electrocardiographic improvement in lead 4.

I wish to digress for a moment and point out that persons with hypertension who have an overactive pituitary gland appear to do far better on the low sodium diet if the pituitary overactivity is counteracted by either the injection method or pituitary irradiation. At any rate, that is the clinical impression that I have gained during the past two years. With regard to hypertension due to an active pituitary gland, it is interesting to note that Griffith[13] reported 63 cases of hypertension with overactive pituitary glands in which the patients were treated by pitressin injections with improvement in 50 per cent. Pendergrass[14] reported on 142 patients who were treated with pituitary irradiation and concluded that in properly selected cases benefit from radiation therapy should be derived in 75 per cent of persons treated. The criteria for selecting patients for radiation treatment are (1) positive bio-assay for antidiuretic hormone in serum, (2) a roentgen dose

of 1,000 R delivered into the hypophysis (2,000 R in air), to be repeated in three months if the test for antidiuretic hormone in serum has not become negative, (3) negative bio-assay for gonadotropic hormone in serum, (4) normal renal function as shown by a plasma creatinine test after the method of Steinitz and Turkand[15] of 1 mg. per hundred cubic centimeters or less (5) good clearance of injected dye from each kidney as shown by urography.

ALARM REACTION

There is increasing evidence that Selye's[16] *alarm reaction* comes into play in the interrelationship of the pituitary and adrenal glands to sodium retention. Selye's theory in brief is that "any known specific noxious agent which causes sudden general systemic damage elicits the shock phase of the alarm reaction probably because it liberates toxic metabolites from the tissues; if damage is not too severe and permits of survival, the damaging agent, perhaps through a hypothetical toxic metabolite produced under its influence, acts on the anterior lobe of the pituitary and stimulates it to discharge adrenotropic hormone; this stimulates the adrenal cortex to produce an excess of corticoid hormones." The following chart depicts Selye's hypothesis.



It is of extreme interest that Selye recently has been treating his younger hypertension patients according to the following plan:[17]

1. A low sodium diet (no extra salt in cooking or at table).
2. A low protein diet (one helping of meat, fish or fowl, or one egg per day plus ordinary intake of vegetable protein). Caloric intake is amplified by carbohydrate intake as indicated.
3. Six Gm. of ammonium chloride per day in doses of 1½ Gm. after meals and at bedtime.

The ammonium chloride may exert a beneficial effect by binding the sodium ion and thereby facilitating its excretion. Selye's recent studies suggest that the adrenal cortex by influencing the electrolyte metabolism may be a factor in the pathogenesis of hypertension. He has produced hypertension and nephrosclerosis in animals by exposure to nonspecific damaging agents such as cold or rage, et cetera, also by injections of anterior pituitary substances and corticoid hormones. It is interesting to note that the vegetative nervous system plays an important role in mediating the alarm reaction and therefore sympathectomy for the relief of hypertension merely interferes or blocks these adaptation reactions.

In a discussion of the biochemical changes in hypertension (Francis) Selye[18] concludes that in some persons with hypertension there is an increase in the ratio of serum Na to Cl, expressed as Na/Cl, which is apparently never found in persons with normal blood pressure and which may be related to an abnormal adrenal cortical hormone production. Some patients show an increased glycocorticoid urinary excretion and this is accompanied by a decrease in urinary 17-ketosteroids. In patients showing an increased Na/Cl ratio, as well as in some not showing it, encouraging results have been obtained with ammonium chloride therapy. The study was made over a two and one-half year period* and all patients were treated with ammonium chloride 1½ Gm. after meals and at bedtime. This therapy was preceded by a placebo tablet for a period of three to six weeks until the blood pressure was at a stable basal level.

According to Soffer and Engel[19] desoxycorticosterone probably is produced in excess along with corticosterone, dehydrocorticosterone and other crystalline fractions due to the overstimulation of the adrenal cortex. Desoxycorticosterone has been shown to cause marked retention of sodium, chloride and water. Moreover, the continued use of this hormone in Addison's disease, for example, can result in edema, heart failure and a temporary production of hypertension.

Soffer,[20] in his monograph on diseases of the adrenals, expresses the opinion that facts would

*McGill University Clinic, Royal Victoria Hospital, Montreal.

suggest that desoxycorticosterone has a specific hypertensive effect which, under normal conditions, is normally balanced by other fractions of the adrenal cortex.

Finally, Perera[21] and others have shown that even in normal individuals repeated injections of desoxycorticosterone will cause an increase in blood pressure.

THE PREHYPERTENSIVE

In keeping with our modern methods of disease prevention, the possibilities of the prevention of severe hypertension and its resultant arteriolar disease should not be overlooked. Ayman[22] has shown the marked hereditary tendency towards the development of this disease. In a more detailed study[23] covering 1,524 members of 277 families, he found that in those families in which the parents had normal blood pressure the incidence of hypertension in the children was 3.1 per cent; in families in which one parent had hypertension, the incidence in the children was 28.3 per cent; and in those families in which both parents had hypertension, the incidence was 45.5 per cent.

Hines[24] and Platt[35] report significant studies supporting the hypothesis that primary hypertension is an hereditary disease. Hines, employing the cold pressor test,* found the so-called prehypertensives the most frequent hyperreactors. It therefore is vital in taking the history of a patient with hypertension to pay particular attention to the family history. The patient should not be asked simply whether his parents had 'high blood pressure' but also whether his parents or grandparents died of cerebral hemorrhage ('stroke'), uremia (Bright's disease), or coronary disease (hardening of the arteries), the frequent terminal episodes of hypertension. All of us probably have been too lax, paying merely lip service to patients who exhibit transient hypertension. (By 'transient hypertension' is meant a blood pressure reading of over 150 systolic and 90 diastolic which at a later examination has returned to normal.)

Levy[26] and others, after a study of 22,741 army case records, came to significant conclusions regarding transient hypertension. The period of observation of the patients was from one to twenty-five years. They conclude: "At all ages sustained hypertension developed more frequently in those with previous transient hypertension than in those who never showed an elevation of blood pressure. The rate for disability retirement with cardiovasculorenal diseases was consistently higher among those with transient hypertension than in those without, at all ages from 35 to 60. The death rate with cardiovasculorenal diseases was also higher in those with transient hypertension; the figures rose in the older age groups."

These same observers,[27] in an analysis of 22,741 officers in the U. S. Army, stress the deleterious effects of obesity on hypertension and point out that transient hypertension, when present with transient tachycardia and overweight, greatly increases the probability of the development of sustained hypertension in the future.

White[28] also points out the frequent association of obesity with hypertension.

Newburgh[29] states the correlation especially well: "Between the ages of 45 and 55, twenty-five pounds of excess weight mean a 25 per cent greater chance of dying within the next year; fifty pounds of overweight mean that you have a 50 per cent greater chance of death in the next year than the person of normal weight."

The following case, although certainly not an unusual one, is typical of the prehypertensive individual.

Mr. J. M., age 31, business executive, works under tension, with many social and community obligations. He was first seen Nov. 10, 1947, complaining of marked dizziness and occipital headaches. The family history, as it pertained to hypertension, was significant. The patient's weight was 174 pounds; the blood pressure was 166 systolic and 102 diastolic. Routine physical studies showed no abnormalities. The following day the blood pressure reading prior to the cold pressor test was 148 systolic and 98 diastolic. After the cold pressor test the blood pressure was 182 systolic and 122 diastolic. (This elevation is positive according to Hines.) The patient was placed on a low calorie diet and several visits were spent discussing his mode of living, adjustments, et cetera. On Dec. 1, 1947, his weight was 163 pounds, the blood pressure was 138 systolic and 76 diastolic. On Dec. 12, the patient came into the office on an unscheduled visit complaining of his original symptoms and under considerable tension. He explained that he had slipped off his routine. The blood pressure was 158 systolic and 98 diastolic. He was given the same advice as on previous visits and when seen March 3, 1948, the blood pressure was 128 systolic and 78 diastolic. This type of patient should be watched as closely as one would a potential diabetic, for if such a patient is allowed to drift the ultimate picture

*This test is a simple office procedure and should be done more often.

probably would be that of full blown hypertension.

The extreme importance of the prehypertensive aspect of hypertension is excellently summarized in the following paragraph:[30]

"Primary hypertension is one of the most important medical problems of the day. Forms of treatment now in vogue, including dietary regimens and surgery of the sympathetic nervous system, are admittedly only palliative. Preventive measures in light of present knowledge must be directed toward eliminating those factors in the chain of production that are amenable to treatment, namely, correction of dietary habits and introduction of proper mental hygiene at an early age, particularly for those with a known hereditary tendency to hypertension. The apparently ever increasing mental stresses and strains incident to competitive struggle for existence are probably related factors in the etiology of hypertension. Therefore, a reorientation of goal for the *prehypertensive* person is necessary. This might well be away from the commonly accepted goals of wealth and prestige to the perhaps less competitive fields of culture and philosophy."

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Note: The author wishes to express his appreciation to Dr. Walter E. Vest for his many helpful suggestions.

CONGENITAL ANOMALIES

I recall many years ago visiting the office of the medical director of one of the large insurance companies. Three of the secretaries had obvious congenital anomalies. The inquiry was made whether these young women were employed on account of the kindheartedness of the director and from charitable motives. The answer was "no," that they were the best secretaries he had ever had and that he believed their defects acted as an inspiration to keep them on the job and always to be polite and courteous. He believed their defects were assets—not liabilities. He further stated that if he had to employ another secretary he would be inclined to search for one with a physical defect.

This incident is cited for the purpose of stimulating those who work to help those individuals affected by congenital defects and to suppress the pessimist who wonders whether it is worth while to devote time, money, study and energy to their relief.—William E. Ladd, M. D., in Surgery, Gynecology and Obstetrics.

Chronic Brucellosis should always be considered in the differential diagnosis of any chronic, low-grade, remittent, or recurring illness with tiredness and exhaustion as a feature.—J. F. in Ohio St. Med. J.

DERMATOSES OF ALLERGIC ETIOLOGY*

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Dermatologic allergy is one of the major altered reactions of living tissues to a substance. It is my purpose to consider the multiple reactions of the skin which are allergic in nature.

The original concept of allergy as formed by Von Pirquet and Schick[1] and as interpreted by Sulzberger[2] in its simplest and most inclusive form, defines allergy as any specifically acquired alteration in the capacity of living tissue to react to a substance, which substance may be animate or inanimate.

For a number of years, it has been customary to classify skin lesions primarily according to their physical appearance and to designate the diseases represented by the use of certain descriptive terms.

Lesions are designated as annular, nummular, corymbose, circinate, et cetera. They are further described as vesicular, macular, papular and pustular, as erythematous, violaceous and pigmented, as scaling, follicular and hyperkeratotic, as edematous, indurated, and lichenified. These terms are descriptive and, with few exceptions, provide the physician with very little information which will allow him to employ treatment on a rational rather than an empiric basis.

During recent years, due largely to efforts of allergists, pathologists, immunologists, bacteriologists and dermatologists, it has been increasingly recognized that many of these variously described lesions have a common denominator in that they represent allergic responses to allergenic substances. It is now generally known that many lesions previously described by a combination of the terms listed represent allergic reactions within the various layers of the skin. The gradual recognition of the allergic implications of dermatology has led to further confusion in the nosology of skin diseases, so that now we not only describe the lesions as formerly, but frequently add an adjective which hints at the etiology of the lesion. It is now definitely recognized that many exfoliative, eczematoid, scaling, purpuric and lichenified lesions have a definite allergic etiology. In order to focus our attention on the mechanisms responsible for the lesions and to provide a basis for their consideration which will lead to their evaluation and treatment on a rational basis, I will group those skin diseases which may at times have an allergic etiology, as follows:

I. Eczematoid dermatoses
   1. Atopic dermatitis
   2. Contact dermatitis
   3. Eczematoid dermatoses of bacterial origin.
      a. Fungous eruptions; dermatophytosis and dermatophytid
      b. Eczematoid responses to other types of organisms as bacterid

II. Urticaria and angioneurotic edema

III. Allergic purpura

IV. Miscellaneous dermatoses
   1. Drug allergy
   2. Physical allergy
   3. Others

The term allergic dermatoses in this discussion will be limited to those conditions or diseases of the skin in which allergy is of etiologic importance as shown in the foregoing grouping. Knowledge of the anatomy, physiology and pathology of the skin structures is necessary in order that one may appreciate the location of the shock tissue of the allergic reaction.

An eczematous reaction of the skin is one of an inflammatory type and may be described under the heading of contact dermatitis, eczematous dermatitis, dermatitis venenata, or occupational eczema. Its involvement is primarily that of the epidermis by an edematous lesion, whereas the lesion of atopic dermatitis usually is located in the upper layers of the corium, particularly in the area of the capillary loop, and the primary lesion of urticaria is in the deeper layers of the corium.

In arriving at the diagnosis of allergic dermatoses, one approaches the problem in a similar manner as is done in the other allergic diseases. This includes, of course, a careful and detailed history, physical examination, sensitization studies including scratch, intracutaneous, patch and passive transfer tests, as well as therapeutic and clinical trials. The history will bring out the atopic basis or hereditary tendency for the dermatoses. The character and distribution of the eruption is of great value from a differential diagnostic point of view, as the presence of vesicular lesions on exposed areas of the skin strongly favors the consideration of a contact dermatitis, whereas the lesions of an atopic eczema with lichenification usually involve the flexural areas.

CONTACT DERMATITIS

One or more contacts with a substance may induce hypersensitivity of the skin, which is the

*Presented before the 81st Annuol Meeting of The West Virginia State Medicol Associotion, ot Huntington, W. Va., Moy 10, 1948.

predisposing factor to a subsequent allergic eczematous contact type of dermatitis that may be acute or chronic. The term 'contact dermatitis' involves the epidermis, is produced by contact with external irritants and is characterized by a predominantly vesicular type of eruption. The etiologic agent must be found and eliminated from further contact with the skin in order to prevent recurrences of the dermatitis. According to Sulzberger,[2] patch testing for the etiologic allergen presumably is successful in about one-third of the cases of acute and subacute contact dermatitis in which the causal allergens are not immediately apparent.

Symptoms and Distribution—The onset usually is sudden and the areas first affected and most severely involved are those of greatest exposure to the causative agent. The earliest manifestation is erythema limited to the area of contact which in the acute stage is shortly followed by edema, vesiculation, oozing and crusting. There may be secondary infection resulting in pus-filled vesicles and pustules. In the subacute form the dermatitis is characterized by papules, slight edema and erythema but no visible vesiculation. After a period of several days these manifestations subside to mild erythema and slight scaling. In the chronic stages, the effected areas are thickened, lichenified and covered with loosely adherent scales. Normal skin markings are exaggerated with a grayish-tan pigmentation superimposed upon a dull erythematous background.

In obtaining the history of contact dermatitis, it is necessary to determine the following: the time of onset, whether sudden, the areas first involved and those areas most severly involved, area of greatest exposure, causative agent, whether initial manifestation was erythema limited to the area of contact followed by edema, vesiculation, oozing, crusting, secondary infection. Are lesions of the acute or chronic stage; is pruritus constant or of increased severity with recurrent exposure and does the location of contact suggest a possible etiologic agent? One must also observe morphology, distribution, the chronology of onset, spread of dermatitis, a record of prescribed and self medication including laxatives, suppositories, analgesics for headaches, dysmenorrhea, neuritis; tonics, sedatives, and soporifics, oral medication such as Fowler's solution or potassium iodide; nerve and cough mixtures, parenteral and other types of medication.

The most important essential point in the chronologic history includes: (1) duration of dermatitis, (2) rapidity and specific time of onset and the exacerbation in relation to weekend, work week, seasons and kind of occupation and hobbies, (3) suspicions of aggravating agents, (4) effect of local therapy in respect to aggravation and (5) the association of onset or recurrence of dermatitis with internal, parenteral, or topical administration of medicaments.

A special history sharply focused on the relationship between the exposure to causal allergens and the occurrence of the dermatitis is important.

General environmental factors include: seasonal occurrences especially with relation to plants, the effect of absence from the usual environment upon the course of dermatitis, non-seasonal, periodic exacerbations or recurrences such as handling of rotogravure sections of a newspaper, possible contacts with substances used by persons with whom patient is associated, contact with leather bags, polishes, weeds, grasses, vegetables, plants, flowers and fertilizer; in the home are included chemicals, soap powders, bleaches, turpentine, kerosene, disinfectants, sprays, floor wax, upholstering, draperies, plants, pets, house dust, medicaments, etc.

Consideration to the patient's occupation should be given and one must go into all the possible contacts, including substances and their composition and sensitizing capabilities. A careful consideration of the area of predilection usually facilitates the etiologic diagnosis.

In the differential diagnosis one has to consider a number of dermatoses which may closely simulate contact dermatitis, the most common of which are nummular eczema, atopic dermatitis (including infantile eczema), seborrheic dermatitis, eczematous types of fungus infections and their allergic reactions (epidermophytid) and drug eruptions of an eczematous type. The latter frequently are confusing, hence it is necessary to note essential differences.

The treatment of contact dermatitis requires the elimination of the causal allergen, if possible, and this is the most important principle. However, in actual practice it is not always possible to avoid the causal allergen and it may be necessary for one to attempt desensitization with plant oils, house dust and the like.

The therapeutic management of contact dermatitis is divided into three parts: (1) The causal allergen must be discovered and eliminated from further contact with the patient. (2) Prompt symptomatic topical treatment must be instituted in all cases, especially those in the acute or subacute form. Proper procedures should be instituted even though the etiologic agents are not

identified. Many cases may be prevented from entering the chronic or intractable form. (3) When plants and animal emanations are the etiologic agents, hyposensitization with oil extracts should be given a thorough trial.

The symptomatic treatment[12] is divided into two types, depending upon the stage of the dermatitis:

I. Acute edematous and vesicular weeping dermatitis
   1. Wet dressings usually applied cold
      a. No secondary infection. Aluminum acetate (powder) 1/60 aqueous dilution. Liquor Burrows diluted 1/20 to 1/60.
      b. When secondary infection is present 1/2,000 to 1/5,000 potassium permanganate soaks, baths or dressings offer best results when warm.
   2. Lotions are worthy of consideration when it is impractical to have continued wet dressings for more than 30 to 45 minutes every 3 to 4 hours. Among these may be considered calamine lotion with or without phenol, menthol, camphor oil, liquor carbonis detergens; also calamine liniment or ointment may be used if the lesions are dry.

II. Subacute dermatitis. Boric acid ointment 10% and zinc oxide ointment are worthy of consideration.

III. Chronic lichenified and scaling dermatitis warrants the consideration of keratolytics or reducing agents including salicylic acid 2%, resorcin 4 to 10%, or chrysarobin 2 to 4% in ointments to reduce the lichenification.

All stages of contact dermatitis, whether or not there be secondary infection, respond to x-ray therapy. The treatment should be administered in fractional doses of approximately 75 R at weekly intervals. It offers the quickest response in the acute and subacute stages. If the chronic stage does not respond to 10 treatments, radiation should be discontinued.

ATOPIC DERMATITIS

Tuft[4] states, "The term 'atopic dermatitis', also known as neurodermatitis, atopic edema or allergic eczema, is employed to designate an inflammatory condition of the skin characterized by thickening of the skin or lichenification, especially involving the flexures, and occurring in an atopic individual as a result of sensitization to water soluble allergens brought to the skin by the hematogenous route."

Atopic dermatitis occurs, as a rule, in individuals of a particular type whose immunologic processes differ in certain respects from those of normal persons. According to various statistics, 50 to 65 per cent of cases of atopic dermatitis have an antecedent history of asthma, hay fever or atopic dermatitis. The most important predisposing factor in atopic dermatitis is hereditary predisposition.

For convenience, atopic dermatitis may be classified[12] according to three stages: (1) infantile atopic dermatitis (infantile eczema), (2) juvenile atopic dermatitis and (3) atopic dermatitis (disseminated neurodermatitis).

Infantile atopic dermatitis nearly always involves the face and flexural areas such as antecubital and popliteal fossae. In the acute stages there is some weeping and swelling of the skin which may extend to the ears, scalp and neck, as well as the more generalized type of eczema which is symmetrical. As these skin lesions spread, they may assume an erythematous, edematous, weeping vesicular, crusted appearance and exhibit well demarcated plaques. These plaques may be dry or scaly and frequently one encounters excoriated, hemorrhagic crusts and secondary infection following trauma, scratching or rubbing.

The clinical diagnosis warrants complete general examination to eliminate other forms of eczema of the contact, seborrheic and microbic types. According to Hill, about 75 per cent of all cases of eczematoid dermatitis found in infants is of the atopic type and usually occurs from the second to the sixth month of life. The majority of these cases respond to treatment before the age of two. However, the disease is variable. Some patients may recover permanently, others may recover from eczema and develop other allergic manifestations, still others may recover only temporarily and have recurrences during childhood and adolescence or during young adult life. Some cases of atopic dermatitis may be continuous, with exacerbations and remissions throughout the entire span of life from infancy to adult middle age (30-40) when it usually disappears.

Juvenile atopic dermatitis may not make its appearance until adolescence. It tends to be papular rather than vesicular. It usually is dry and exudative. The face, especially the forehead and eyelids, the areas about the ears and neck, upper trunk and chest and the flexural

areas are the sites of predilection although the lesions may become disseminated. There may be hyperpigmented plaques in this stage or age. The lesions are dry, scaly, lichenified and erythematous in type. In the juvenile type as in the infantile type, the pruritus is intense, frequently nocturnal and may occur in crises. Patients are subject to episodes of rubbing and scratching which intensifies the lichenification of the lesions. Not infrequently, secondary infection with vesiculopustular and crusted lesions of impetiginous type follow scratching and secondary infection.

The adult atopic dermatitis, or disseminated neurodermatitis, is rather typical. It is easily recognized and uncomplicated. Patients are usually slender, alert, hyperkinetic in type. They may have a mask expression which is sometimes explained as a control of neuromuscular tension. The areas of dermatitis is usually dry, may have a peculiar grayish tinge or grayish-tan hue. As with the juvenile type, the face, neck, upper part of the body, cubital and popliteal fossae, wrists and dorsa of the hands are quite dry, scaly and lichenified. In this form, when the pruritus is severe, there are frequent excoriated areas which ooze and there is increased moisture following scratching or rubbing. Pruritus is so severe at times that it interferes with sleep. These patients are usually well nourished unless they have been on restricted diets over extended periods. It is desirable to restrict these patients' diets over extended periods if a food or foods can be definitely incriminated. In both the juvenile and adult atopic dermatitis, seasonal exacerbations are not infrequently encountered. The symptoms are aggravated by excessive perspiration, particularly in the summer and by cold air and wind in winter. Atopic cataracts are seen in juvenile patients as well as in the young adult; however, one must eliminate other etiologic causes of the cataracts.

In the allergic approach, the program of choice is one of sensitization studies, employing skin tests of the scratch and intracutaneous types by direct testing or by the use of indirect or Prausnitz-Kustner testing. Direct testing usually is the method of choice but it has its limitations. It does offer a more rapid and concrete approach to the problem. Contraindications to direct skin testing include extensive involvement of the skin, psychogenic effect on the patient and parents, a nonreactive type of skin and inability of the patient to be available for repeated skin testing.

Numerous instances have been reported when elimination or trial diets conclusively demonstrate that food is responsible for the eczema. Those foods most commonly found to cause the trouble include wheat, milk, eggs, oranges, spinach, peas, fish, cod liver oil, tomatoes, and chocolate. Beneficial effects by the elimination of a great variety of nonspecific external irritants such as water, heat, sunlight and friction often have been obtained. Inhalants, particularly wool (which may also be a contactant), dust, perfume, epidermals and the like have a contributing effect in upsetting the allergic equilibrium and producing lesions of atopic dermatitis. Hyposensitization is necessary in certain instances when complete avoidance is impossible. The most conclusive proof of foods and inhalants as well as contactants causing infantile eczema may be demonstrated by repeated avoidance and exposure to certain offenders and the precipitation at will in certain instances of exacerbation by exposure.

Skin testing is approximately 50 per cent accurate in these patients and we have to recognize false positive and false negative skin tests. However, skin testing is our best method of approach and these tests are a worth while adjunct in the handling of problems. The ideal treatment is etiologic therapy which may be out of the question in the beginning. The therapeutic program is based upon the individual case and may include the following: (1) the correction of demonstrable quantitative and qualitative defects in the diet and the eradication of existing digestive disturbances, (2) the elimination of possible contact or inhalant allergens, (3) local therapy, not overtreating the eczema, (4) the control or management of other allergic manifestations, (5) sedation as is necessary, (6) supplemental vitamins of the synthetic type when natural sources are contraindicated, (7) consideration of climatic and environmental changes and (8) trial diets, food diaries, psychotherapy, restraint, adequate rest and limited use of soap and laundry chemicals.

When foods are added to the diet, milk, eggs, tomatoes and oranges should be added last. Substitutes for milk including goat's milk, breast milk, soy bean milk and other foods should be added over a seven day period since time is required to appreciate clinical changes.

Undernutrition, diarrhea and infection must be cleared up. Focal infection such as tonsillitis, otitis, bronchitis and pyelitis may at times produce exacerbations.

Dermatologic management includes all forms of topical treatment, depending upon the stage of the dermatitis, the age of patient and the tolerance or response of the lesions to therapy.

The most useful therapeutic adjunct in both juvenile and adult atopic dermatitis is superficial x-ray therapy, although the danger of overdosage cannot be too strongly emphasized. When there is evidence of hypothyroidism, thyroid extract is indicated; other systemic measures including nonspecific protein injections may be of value in a limited number of cases.

ECZEMATOID DERMATOSES OF BACTERIAL ORIGIN
(Allergic Manifestations of Superficial Fungus Infections)

'Dermatophytid' is the term used to designate secondary cutaneous reactions to fungus[12] infections. This general term embraces such specific terms as trichophytid, microsporid, epidermophytid, moniliid, savid and other fungus ids. Dermatophytids are produced by the action of fungi and/or their products. They are disseminated by the blood stream to the cutaneous tissues which have been sensitized by the fungus infections. During an initial fungus infection, sensitization occurs and subsequently dermatophytids may occur. This has been shown both clinically and experimentally to be a response of the hypersensitive skin to fungi and their products by the following sequence of events: (1) the presence of and/or experimentally produced primary focus of infections, (2) a period of incubation between the onset of the primary infection and development of the positive tricophytin skin test, (3) recovery of fungi on blood culture and (4) the appearance of dermatophytids.

Ringworm of the scalp is uncommon in adults but is quite common in children. Epidermophytosis of the feet, hands and groin is common in adults but uncommon in children. Therefore, a vesicular eruption on the hands in an adult is more likely to be an epidermophytid than is a similar eruption on the hands of a child.

The location or site of the infection is an important factor in influencing the severity of the infection. The more severe infections are found in the moist areas such as the axillae, groins, between the toes and on the soles. Moisture, maceration and fissuring seem to provide ready access of fungi and their products and permit their being taken up by the blood stream. This explains a high incidence of epidermophytids whether the infection be mild or severe.

Localization and higher incidence of epidermophytids are influenced by trauma, friction, maceration with soap and water, humidity, light, air, aeration and temperature and the terminal type of circulation in the palms and soles. The production of hypersensitivity and ids follows irritation of primary focus of infection by various treatments with strong keratolytic agents and roentgen rays, friction and trauma.

The most common form of trichophytid occurs as a generalized lichenoid eruption located chiefly on the trunk and extremities and consists of small, follicular acuminate or flat, pale, red papules which may be capped by a vesicle or pustule, or, they may be scaly and often are topped by a long horny spine. The papules may be grouped to form an annular or an arciform configuration. The papules may form oval or circular plaques. The course of the eruption is short, lasting up to several weeks but recurrences are common.

As a rule, epidermophytids occur in association with dermatophytosis of the feet. There also may be secondary infections elsewhere including the groins and hands. The feet and/or hands may be sites of the infection and epidermophytid at the same time. The fungus is never found in the epidermophytids.[8]

The diagnosis of infection itself must be established. The most essential diagnostic procedure is to demonstrate the fungus in the lesions by microscopic examination and by culture. One of the latest and most satisfactory culture materials is Littman's medium,[9] which greatly facilitates the recovery of these fungi. This medium contains streptomycin which inhibits the bacterial growth and it is superior to Sabouraud's medium. Microscopic examination of hairs, scales, vesicle roofs and nail parings are simple and are universally used. Many times fungi in lesions may be demonstrated by culture when microscopic examination fails. The incidence of epidermophytosis of the feet and groins sharply increases in the summer and, accordingly, the number of cases of epidermophytids increases at that season. A positive trichophytin test is helpful in making the diagnosis. Hyposensitization as a therapeutic trial may cause an extreme exacerbation and therefore very dilute extract should be given in rapid increases rather than starting with a more concentrated preparation. Epidermophytids occur at times when there is no evidence of fungus infection of the skin of the feet and a careful search for infection of the nails should be made by culture and microscopic examination.

Of the bacterids,[12] pustular bacterids of the hands and feet are the most distinctive entity. In contrast with epidermophytid, they are rare but do occur with sufficient frequency to warrant their consideration. The dermatosis seems to be directly associated with a focus infection. The initial lesion is a minute vesicle filled with clear fluid which may within a few

hours become milky and viscid and the smear may reveal leukocytes. There may be numerous discrete, deep-seated pustules rarely larger than a pinhead, with localized areas on the palms, palmar surfaces of the fingers, the soles and plantar surfaces of the toes. Hyperkeratotic scale forms following recurrence of old crops of these pustules which have become desiccated and thickened. New crops of pustules may occur periodically and may be massed with the older lesions giving rise to the morphologic appearance of the involved area. These patches enlarge by the occurrence of new pustules. The most frequent foci are apical abscesses of the teeth and infected tonsils. Recently, I encountered a case with a bacterid reaction of the hands secondary to chronic cholecystitis and following cholecystectomy the lesions disappeared.

The treatment of dermatophytids is symptomatic as the lesions are of short duration and run a self-limited course. Treatment of the underlying fungus infection will result in a ready disappearance of the dermatophytid. Prophylaxis is essential to prevent mycotic reinfection and the recurrence of ids. Hyposensitization with trichophytin and oidiomycin is of distinct value but should be approached with extreme caution as reactions are not infrequent.

URTICARIA AND ANGIONEUROTIC EDEMA

Urticaria, which also may be called hives, mad itch or nettle rash, is an inflammatory, edematous disorder of the skin manifested by the presence of whitish, pinkish or reddish elevations or wheals that are transitory in character and are accompanied by burning, itching and a stinging sensation. These lesions vary in size from a small patch to large welts or swellings covering an extensive area. They usually are multiple and frequently are seen in covered parts of the skin.

Angioneurotic edema simulates urticaria and, in addition, the lesions are discrete, multiple, large, pale swellings of brawny character involving a considerable area such as the whole hand, side of the face, genitals, lips or eyelids. The edema involves the deeper layers of the corium. Those areas involved are the structures that are more distendible. The hereditary factor is more marked in angioneurotic edema than in urticaria. The etiologic factors include foods, inhalants, pollens, contactants, drugs, ingestants, nervous and psychogenic factors, intestinal parasites, foci of infection, endocrine upsets and insect bites. Food allergy probably is the most frequent offender and the most commonly incriminated allergens include milk, eggs, wheat, beef, chocolate, nuts, shellfish, fruits and vegetables. Drugs probably are the second most common offenders and included are aspirin, coal tar derivatives, phenolphthalein as found in many proprietary laxatives, quinine, iodides, bromides, opiates, barbiturates and penicillin. Other miscellaneous allergens including foreign sera, antitoxin, insulin, endocrine preparations, liver extract, cosmetics, pollens, dust and physical agents must be properly evaluated. The etiologic agents have to be excluded by careful study including physical examination and sensitization studies, although skin tests in certain urticaria and angioneurotic edema patients are of extremely limited value. Therapeutic and clinical trials may be particularly helpful. The same is true of basic elimination or trial diets. Treatment in the acute stage includes epinephrine by hypodermic, oral administration of ephedrine preparations and intravenous calcium. The antihistaminic drugs, the more common of which are pyribenzamine and benadryl, are of value provided the patient can tolerate them. In the chronic type management is more difficult and any foci must be eradicated. Correction of hypochlorhydria or anacidity is indicated. Possible offending allergens have to be excluded. Nonspecific treatment including autohemotherapy, autogenous bacterial vaccines, histamine therapy as well as control of the general state of the patient including endocrine therapy prove worth while in certain instances.

ALLERGIC DRUG ERUPTIONS

Drug eruptions[12] are those dermatoses produced by the internal action of drugs whether they have been ingested, absorbed through the mucosa or skin or whether they have been administered parenterally. These drugs may be synthetic, or natural, simple chemicals, or complex mixtures such as serums, vaccines, extracts and the like but the more common causes of dermatoses are simple pharmaceutic chemicals.

Not all drug eruptions are due to allergy but may be primarily toxic reactions as a result of cumulative effect, among which are keratosis and discoloration of the skin from deposits of metal. Those eruptions caused by drugs which do not in themselves ordinarily affect the skin are due more or less to demonstrable, specific hypersensitivity. There may be a history of cutaneous manifestation, systemic symptoms, involvement of a single organ, skin or associated fever, lymphadenopathy, malaise, prostration, psychosis, encephalitis, retinitis, optic atrophy, asthma, leukopenia, eosinophilia, anemia, thrombocytopenia, blood dyscrasias, hepatitis, nephritis, hematuria,

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pancreatitis, purpura, myocarditis and cardiac arrythmias.

Depending upon the character of the drug eruption, the patient should be questioned as to the ingestion or the use of drugs as follows: (1) Those lesions which are purely eczematous with erythema, papulation, vesiculation, weeping and scaling should arouse suspicion of ingestion of or contact with quinine, cocaine, local anesthetics, ephedrine, mercurials, formalin and, occasionally, arsphenamines. (2) In urticaria and angioneurotic edema, question the use of salicylates, barbiturates, penicillin, belladonna, atropine, iodides, bromides, the opium group and phenolphthalein. (3) In scaly erythematous eruptions, purely erythematous or scarlatiniform and morbiliform and dermatitis and exfoliative-like conditions, question the use of arsenicals, arsphenamine, belladonna, balsams, heavy metals, nirvanol, salicylates and the sulfonamides. (4) In erythema multiforme-like eruptions, consider phenolphthalein, salicylates, barbiturates, soporifics and the sulfonamides. (5) In erythema nodosum-like eruptions, consider iodides, bromides and salicylates. (6) In acneform, furunculoid and erysipelas-like eruptions, consider bromides, iodides, chlorine, oils and tars. (7) In pemphigoid, ulcerating and vegetating eruptions, consider bromides and iodides. (8) In purpuric eruptions, consider iodides, arsphenamine, the sulfonamides, carbamides (sedormid) and barbiturates. (9) In lichenoid and lichen planus-like eruptions, consider arsenicals, arsphenamine and gold. (10) In fixed and circumscribed, erythematous, edematous or bullous and polychromatic pigmented eruptions, consider phenolphthalein, antipyrine, phenacetin, barbiturates, salicylates, arsphenamine, gold and the sulfonamides.

The important points to bring out are the sudden appearance of the eruption, its symmetrical arrangement, the more or less generalized distribution, the bright color of the lesions and the presence of itching.[10]

Shock tissues involved in drug eruptions include the deep cutis, cutis, epidermis and follicles. Eosinophilia up to 50 or 60 per cent, or more, is seen on occasion. Any age group may have allergic drug eruptions but adults are more frequently involved. The sites of predilection in drug eruptions are generalized without regard to flexure or exposed surfaces. Scratch and endermal tests rarely are positive in instances of drug allergies. Patch tests with drugs are not infrequently positive and similar to those seen in contact dermatitis. The reaction time may vary from one minute to a number of days. The causal substances in drug eruptions are allergens but not atopens or antigens. Treatment is the removal of the causal allergen.

ALLERGIC PURPURA

Purpura is characterized by an eruption of reddish or purplish spots occurring in and beneath the skin and mucous membranes as a result of spontaneous hemorrhagic extravasation. The spots vary in size from small or petechial hemorrhages to the larger or ecchymotic types and less commonly to that of a large hematoma. Purpuras are classified as primary and secondary. Secondary purpura is seen in the course of other diseases such as erythema multiforme, dermatitis medicamentosa, serum disease, measles, septicemia and bacterial endocarditis.

Allergic (Henoch's) purpura is characterized by the association of recurrent purpuric attacks with gastrointestinal symptoms such as abdominal pain, vomiting of blood and passage of blood in the stools. The onset is suddent, the patient is afebrile and there may be pains in the joints. Hematuria sometimes is present. Nephritis is a frequent complication. Osler, in 1914, reported that the disease probably was due to an allergy.

Diagnosis having been established, the etiologic factors from the point of view of allergy are determined by sensitization studies[13] and elimination and trial diets. The diagnosis is confirmed by the reproduction of the purpuric lesion at will by administration of the offending allergen.

Purpura rheumatica is thought to result from allergic reaction to bacteria, chiefly the Streptococci, and is a manifestation of cutaneous bacterial allergy.

MISCELLANEOUS DERMATOSES

Another condition resembling urticaria is erythema multiforme in which there are recurrent polymorphous eruptions of erythematous character. These eruptions are seen to occur with urticaria and are very similar to urticaria, not only in the etiology but also in the pathogenesis and diagnosis as well as in the response to treatment.

Erythema nodosum is believed to be a toxic allergic reaction of a bacterial nature or, possibly, to result from sensitization to drugs.

Vernal conjunctivitis[3] or vernal catarrh in certain instances may be explained on an allergic basis and responds to treatment by anti-allergic therapy.

Periarteritis nodosa is seen to occur conjointly in individuals with frank allergic manifestations

and Kline and Young, in 1935, reported histologic changes in the tissues of an irreversible, severe, degenerative and necrotic type which were essentially similar to the tissue reaction in individuals highly sensitive to those agents which produce the usual clinical allergic reactions (e.g., pollen, vegetable proteins and animal proteins).[11]

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PREVENTIVE APPROACH IN PSYCHIATRY

Today, more than at any previous time in medical practice, the physician is giving increasing attention to an understanding of the pressing problem of mental health and its solution. Many authorities consider it the most important medical problem facing our nation.

While programs are being developed for the training of specialists in the field of mental health, and additional treatment centers are being organized to serve communities, the need far outstrips the supply of trained personnel. The problem of mental health will be nearer its solution when every physician, regardless of his interest, is cognizant of the importance of emotional tension in every patient he sees. The next step is development of skills in helping the patient and his family resolve the tension. This is a preventive approach, particularly productive in dealing with children.

With but few exceptions, the physician continues to be the first one consulted when "anything goes wrong." His is a unique opportunity and a challenging responsibility.—Reynold A. Jensen, M. D., in The Journal-Lancet.

FETTERING MEDICAL RESEARCH

A basic difficulty today is that so large a proportion of the money available to any medical school is "restricted." Some kind-hearted humanitarian, concerned over cancer or tuberculosis or polio or rheumatic fever, or any one of a dozen other killers, gives his own money and stimulates others to give that a cure may be found. The authorities of the university thus "benefited" have no choice but to carry out his mandate, though their basic departments may be so poorly supported that they cannot supply properly trained men to man the special laboratories and must hire second or third raters.

The emphasis is clearly wrong. The medical schools need money and they ought to get it. But they should get it under terms and conditions which permit them to use it according to the dictates of their own best judgment. If we seek out promising young men and train them properly in the basic techniques, they will gladly give their whole lives to research. Out of untrammeled research come the discoveries which move forward the whole frontier of medical knowledge.—Baltimore Sun.

INDUSTRIAL HYGIENE SERVICE

Concurrently with the evolution of modern industrial medicine, the severity rate of occupational diseases has shown a marked trend. Our medical and safety personnel strive constantly not only to maintain this control but also to increase its effectiveness.

Toward this end, studies are undertaken periodically to detect and correct conditions of a harmful nature. As specific examples of this, studies have frequently been made in various departments to determine dust levels, exposure to noise and exposure to chronic acid mist.

At the present time research is being conducted in an effort to eliminate the toxic effect of certain new lubricants and antitrust compounds used in our operations. It is hoped that these studies will lead to new preventive measures capable of reducing the incidence and severity of dermatitis still further.—Robert T. Collins in Industrial Medicine.

THE PSYCHIATRIST AND THE CLERGYMAN

It is my opinion that psychiatry and religion are separate from each other, that each has well defined reasons for being. The psychiatrist is a physician who treats illness, illnesses which come about mainly perhaps by faulty early interpersonal relationships. Psychiatry is not a religion and in no sense of the word is it a substitute for religion.

In certain areas psychiatry and religion do have overlapping edges. Since this is so, and since both professions have the same goal in mind, cooperation rather than conflict is what is needed. And perhaps the two can come to contribute much more to each other. Perhaps it is time that the two professions compared professional notes in the attempt to make this a better world in which to live.—Donald W. Hastings, M. D., in Northwest Medicine.

The President's Page

This should be a real Thanksgiving for the members of the West Virginia State Medical Association. The Council has taken final action on the proposal for the building of a four-year school of medicine and dentistry, and we are now ready to make recommendations to the legislature in 1949. The final and unanimous agreement reached by the Council culminates literally months of study and hard work on the part of each and every member.

Members of key committees contributed much time from their practice, believing that the people of West Virginia deserve facilities for providing better medical treatment and hospital care.

From every corner of the state and from men and women in all walks of life, we have received encouragement in the preliminary work we have done towards the establishment of a four-year school. We wait with happy anticipation for the day of full realization of our ambitions for legislative endorsement of this important project.

It must be a source of genuine pleasure to the officers and members who in the past have carried the torch for such a school to know that at last we have a concrete proposal to submit to the legislature.

In the very near future the officers and members of the component societies will receive detailed information from the state headquarters' office relative to the part each can play in the campaign for legislative approval. May I personally urge now that you give special attention to all such communications, and comply promptly with all requests passed on to you. If there are any pertinent questions you now wish answered, please, without delay, contact our executive secretary, or any member of the Council.

I could not write this page without recognizing and praising the fine spirit of cooperation that the Council has received from the medical men at large out on the county level, and, as your President, I can frankly say that the Council and all of the allied committees have certainly given much of their time and effort to a cause which we all believe will in the future be considered one of the most important advancements ever made to the field of education in this state.

To Dr. Irvin Stewart, president of the University, and to all of his associates, we are greatly indebted for their technical aid and timely advice. It is the hope of every West Virginia physician that the entire university program, so badly needed, will be given approval. It would be impossible for us as medical men to point with pride to any achievement in the educational field that would result in West Virginia's being a mecca for medical education unless the university obtains for all of its various schools the things necessary to give it a place among the best schools in America.

To this end, I am certain that I can with perfect safety pledge to Doctor Stewart and the Board of Governors of West Virginia University the support of every member of the State Medical Association for the University program.

I know that the young people of this state who in the future will want to study medicine or dentistry will look upon the action of the West Virginia State Medical Association with a feeling of thankfulness and security. They in time may be a grateful group who will return to our rural areas and provide our people with the complete medical care and health service we are so anxious to give.

Thomas Bee

President.

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THE SUN SHINES

The principal plank in the presidential platform of Tom Bess is the construction of a four-year school of medicine and dentistry in this state. The unanimous approval of this project by the Council brings to a happy ending the "training period" preparatory to asking legislative approval for the establishment of the school.

The sun shines for Tom Bess, for it was he who insisted that we must wait no longer to build a four-year school. He has worked hard at his job of being president. but harder as proponent of a new medical-dental school. He has visited every component society, and has made many appearances before other groups, both lay and professional. This campaign, half won, is a personal triumph for Tom Bess and also for Tom Reed, the president elect, who has been in the thick of the fight from the beginning. Doctor Reed is completing his fourth year as a member of the Council

This is not all: The five-man sub-committee which has worked on the project for many months deserves the thanks of all of our members. They have given of their time, and have worked most enthusiastically for the success of the plan. Besides Doctor Bess and Doctor Reed, this subcommittee is composed of Drs. Wade H. St. Clair, chairman of the Council, D. A. MacGregor, chairman of the fact finding committee, and Frank V. Langfitt, chairman of the legislative committee.

All thanks to these doctors and to all of the members of the Council and the two key committees for submitting a plan for medical education that is apparently meeting with state-wide approval.

Success to the efforts of the new committee, which will place the plan before the Board of Public Works in December.

VETERINARY MEDICAL EDUCATION

The physician from time immemorial has been interested in all forms of the healing art. While he is primarily solicitous of the welfare of human beings, he is, nevertheless, a biologist at heart and is concerned with the health of lower forms of life also. He is quite aware that man may contract serious diseases from lower animals. This fact alone is sufficient to make him cognizant of the importance of animal health. Veterinary medicine is of interest to us all, regardless of whether we live in the city or in the country.

The physician has had first-hand experience with medical education and probably has also a speaking acquaintance at least with dental education. Presumably, however, he has only a vague idea of the problems of the education of the veterinary student, of the number of schools of veterinary medicine or their location. Since recently there has been some interest in the establishment of a school of veterinary medicine in this state, it is worthwhile to discuss briefly some of the problems in connection with this field of education.

At the present time there are thirteen recognized schools of veterinary medicine in the United States; seven east and six west of the Mississippi River. The distribution of these schools is fairly satisfactory; there are two on the west coast.

If a student who is a resident of this state wishes to become a veterinarian, he is obliged, of course, to go outside of the state for his training. Theoretically there are thirteen schools to which he may apply. About one-half of these, however, limit their enrollment to *bona fide* residents of the state in which the school is located or select their students from a certain region. For example, Colorado State College limits its students to those who live west of the Mississippi River.

William S. Guthrie, Junior Dean of the College of Arts and Sciences of Ohio State University, has reported that there were 4,209 applications for 634 places in freshman classes in ten reporting schools of veterinary medicine. Dean Guthrie points out that this is not a true picture since it does not allow for duplicate applications. Data were not available to check accurately the actual number of individuals who applied, but he makes this statement: ". . . facilities are short for training an adequate number of Veterinary Doctors."*

The question naturally arises whether many exceptionally well-qualified students were unable to gain admittance. If this is found to be true and if there is a shortage of veterinarians, then the whole matter of veterinary education should be studied immediately and earnest effort made to increase the supply of veterinarians.

It has been said on good authority that the costs of training students in veterinary medicine are about equal to those for training medical students. If this be true, it is indeed an expensive undertaking and no state should enter this field of education without a careful study of the entire matter.

SCHOOL PLAN READY

After years of planning and months recently spent in intensive study, the Council of the West Virginia State Medical Association has conceived what seems to be a workable plan for the development of a four-year school of medicine and dentistry in this state. The outline of the plan will be found in a news article in this issue of the Journal.

While the proposed school will not benefit any of the 436 pre-medical or 93 pre-dental students now enrolled at the University, it will mean much to the hundreds of West Virginia students who may in the future want to complete work in one of these two professions. No longer would they have assurance of but half a professional education.

The Council adopted unanimously the recommendations of the Fact Finding committee and the Legislative committee that the school be established at Charleston and that it be continued as a school of West Virginia University. The plan was submitted to the Council with the full endorsement of the two committees.

This is only the beginning. To meet with success the plan must have the approval of the budget director, the Board of Public Works, and both branches of the legislature. Officers and members of the Council and three key committees will carry the campaign to the people of this state. They will have the full support of many professional and business groups. But, to win, it will take a little more than that. The full support of the members of the legislature is needed.

Each member of the Association should get into the fight right at the beginning, a fight for something that will help West Virginia take her rightful place in the field of medical education.

We hope that each member of the Association will take the time to explain this program to the members of the House of Delegates from his county and the two senators from his senatorial district.

West Virginia needs this four year school and needs it now. We have already spent precious years in planning. Now that the Council has acted there is something definite that can be done. The Council and committees in charge of the campaign need the help not only of doctors but of every affiliated group in the state.

REORGANIZATION PLAN

Something has to be done about the state health department, else we might sink to the very bottom of the list of states in per capita amount spent for health services. Realizing this, the Council of the West Virginia State Medical Association has adopted a reorganization program worked out by a joint sub-committee of the fact finding and legislative committees. The program previously had received the unanimous approval of the members of these two committees. Dr. Thomas L. Harris is chairman of the sub-committee, and Drs. Frank V. Langfitt and D. A. MacGregor are members. Dr. Walter E. Vest, president of the public health council, and Dr. N. H. Dyer, state health commissioner, are members ex officio.

The Council a year ago began the study of a reorganization plan following the adoption of a resolution submitted by Dr. Andrew E. Amick, then chairman of the Council, and the submission of a graph prepared by Dr. Russell B. Bailey, then a councillor elect.

One of the more important parts of the plan agreed upon by the Council is the creation of a state board of health, with powers to employ health personnel. It is realized that adequate salaries must be provided if we are to have a semblance of modern health service in this state. Substantial increased appropriations will be necessary for this purpose. The Council wisely en-

*1948 Applications for the Professional Schools of Medicine, Dentistry and Veterinary Medicine in the United States.

dorsed unanimously the budget that will be submitted by the Department for 1949-1951.

Doctor Dyer is doing a magnificent job as state health commissioner, but he could do much more if he were provided with sufficient funds to enable him to improve facilities, expand services, and pay salaries that will attract top personnel now available in this particular field.

WORK AND BREAKDOWN

As Will Rogers used to say, "All I know is what I see in the papers," and certainly a free press constitutes one of the outstanding educational mechanisms of modern society.

For a long time we have doubted whether the medical profession makes adequate use of newspaper columns, both news and advertising, to educate the population as to what medicine has to offer, both prophylactic and curative. Of course all this should be done as an organized profession and as medicine in the abstract, and never for personal or individual group aggrandizement.

In the last year or two the Colorado State Medical Society has done a wonderful job of public relations and lay education. And now its president, our old friend, John S. Bouslog, breaks into the lay press all over the nation with an interview on "work and breakdown" which appeals to us as being basically sound. Says he: "Nobody ever had nervous breakdown from too much work. The belief in the damaging effects of hard work is little more than superstition. There's nothing to it. Over-worry may cause a breakdown, but that's something else."

We agree with this philosophy. Medicine is, in its very nature, a hard worked calling, and its membership should continue the hard work but eliminate the worry.

BIENNIAL REGISTRATION

For several years, organized medicine has been considering the advisability of requiring the biennial registration of doctors in this state. The reason for such registration is obvious.

A sub-committee of the fact finding and legislative committees, which has been studying the laws on the subject in force in other states, recently submitted a plan which met with the unanimous approval of the two committees. Under the proposed law, doctors would register every two years. The cost would be $2.00. The application would be short, and each doctor would be furnished with a wallet-size registration card.

We can conceive of no reason why this proposed law should not have the united support of every member of the State Medical Association. The sub-committee which offered the plan is composed of Drs. James L. Wade, of Parkersburg, chairman, and Frank V. Langfitt, of Clarksburg. Drs. Walter E. Vest, of Huntington, and N. H. Dyer, of Charleston, are members ex officio.

The proposed registration law has been approved unanimously by the Council, and the legislative committee will sponsor the bill which will be introduced at the forthcoming session of the legislature.

OPEN DOOR

The annual meeting of the West Virginia Academy of Ophthalmology and Otolaryngology, held at White Sulphur Springs the latter part of September, was attended by 36 doctors, about half the total membership of this worthwhile organization.

The Academy, we are told, is interested in obtaining the active support of all doctors in this state who are qualified to become members. The scientific program presented at the Greenbrier was undoubtedly one of the best ever arranged for a meeting of this character, and we would suggest that eligible members of the State Medical Association take advantage of this open-door policy and file application for membership in time to attend the next meeting which will be held at Martinsburg in May, 1949.

COMPLETE SCHOOL NEEDED

The laity are becoming increasingly aware of West Virginia's need for a complete medical school within her own confines, and the state press, generally speaking, is backing the project.

A recent issue of the Huntington Herald-Dispatch carried a significant editorial (which we assume was from the pen of its gifted editor, Mr. Raymond Brewster) discussing this subject. Because of its good sense and sound logic, we quote the entire editorial:

> "With certain political overtones, the movement to establish a four-year medical school in West Virginia has been revived in recent weeks. The movement should receive encouragement of all West Virginians, for West Virginia's great need of a medical and dental school is unquestioned.
>
> "Admittedly the cost, both of establishing such a school and maintaining it, would be great. Considered in the light of West Virginia's vast material resources, however, that cost would be in no sense prohibitive.

"There is every reason to believe that the citizens of West Virginia would support such expenditures as the project necessitates if they are assured that the question of location of the school is not to become a political football.

"The question of location and administration of the school should not be confused. One of the requisites of a good medical school is the availability to students of all types of hospital and laboratory facilities. For this reason, Huntington, along with other West Virginia cities, deserves the most careful consideration as a possible site for such a proposed state medical school."

As the editorial assumes, the need is urgent; the cost, while admittedly great for both construction and maintenance, is not prohibitive; and the selection of location should be dependent upon two factors: (1) Where medical education can be conducted most efficiently; and (2) where adequate medical education can be furnished at the least cost to the taxpayer.

BETTER BREAKFAST PROGRAM

An interesting article on West Virginia's "Better Breakfast Program" was carried in the September, 1948, issue of the American Journal of Digestive Diseases. The full story is reproduced, as it will be interesting to all doctors who have helped make the "Better Breakfast Program" in this state a success:

Breakfast in West Virginia

"For decades the 'continental' breakfast has been a cup of coffee and a cigarette while not infrequently there is a tendency to omit the coffee. The motivation to matitudinal starvation was never any single idea. The intention to reduce and a certain conception of 'smartness' as well as the influence of custom were important, although sometimes a person who was a gourmet at dinner had a constitutional inability to face an adequate first meal. The petite dejeuner, continentally speaking, is seldom more than a concession to custom.

"In America (these United States particularly) coffee is customarily associated with a doughnut or sweet cake all of which is partaken of in a rush because of the urgency and call of the busy day. It is unlikely that anyone in this country requires more than ten minutes to devour his or her breakfast. Wheat cakes will be eaten by those who are manually employed. Millions do not even think of breaking fast until noon.

"The question arises as to whether the total or partial eclipse of breakfast has had any influence on the health, vitality and efficiency of Americans.

"The State of West Virginia has put its official seal on an answer in the affirmative, and during the past year, if you live in this beautiful state, you probably have become breakfast conscious. 'Start the day the good breakfast way' is a slogan employed by the West Virginia Nutrition Committee under the able presidency of M. Estelle Ingoldsby, R. N., and the ramifications of this Committee's work are many and far reaching. A careful survey by a fact-finding group in 1944 of the children in three counties (1207 children from the fifth grade through the 10th grade) was detailed enough to make complete dietary histories, which at once revealed poor breakfasts as a state-wide problem of considerable gravity. Out of every 100 children, 14 ate no breakfast at all. Of the 86 who ate some kind of breakfast, only 10 per cent were good. By 'good' is meant the use of fruit, milk and cereal.

"Special projects of this Committee also include nutrition education through labor organizations, state legislation of the enactment of white flour and bread, and the teaching of nutrition in elementary schools. Nine key cities were selected for intensive, better-breakfast campaigns, utilizing the press, radio, and even free specimen breakfasts at down-town cafes. A 'good breakfast week' was proclaimed by the Governor. Health Commissioner N. H. Dyer, M. D., gave the movement his unqualified support. Even grocers in their newspaper advertisements captioned their displays with such slogans as 'a rousing breakfast.' The State Supervisor of Elementary Schools has observed already among school children 'better learning attitudes; more alertness through the course of a morning's work; and general health improvement.'

"West Virginia is to be commended most highly for its signal efforts in training a new generation to understand the folly of the continental breakfast. In this state it will soon be quite reprehensible to 'skip or skimp' at the opening meal of the day. The fellow who sits up at a counter blowing cigarette smoke over a cup of coffee probably has already become persona non grata in West Virginia.

"Every State in the Union ought to do what West Virginia is doing and has done. Where it appears difficult to discover an entre into the vast problems of nutrition confronting us, it is a most practical step to focus on a single meal, particularly the day's first meal. The inference is that frequently all meals are as 'bad' as breakfast, but education covering the early morning hours is likely to influence the whole day. The beautiful 160 page report on this campaign can probably be obtained by writing directly to the West Virginia State Nutrition Committee, State House, Charleston, West Virginia."

NEED FOR PSYCHIATRIC SEMINAR?

The psychiatric seminar held at Huntington early in October was attended by 274 persons, of which number, but 53 were members of the medical profession.

The original intention of the sponsors of the seminar was to provide psychiatric education for the physician who needs or wants additional information in this particular field. It was announced that the seminar would be open to lay groups, and it developed that representatives from such groups far outnumbered those from the medical profession. The question arises whether there is a need for such a seminar in this state.

While in a sense the seminar failed to achieve the ultimate goal, it did, significantly enough, bring into sharp relief the professional apathy toward a positive contribution to the large group of illnesses which confront the profession.

We think that the seminar is needed and the sponsors have the thanks of those who attended the sessions for one of the finest programs of this nature ever presented in West Virginia. We hope that the seminar will be an annual event, and we

believe that more doctors will attend the sessions when they realize the great value to be obtained from the discussions of psychiatric and psychosomatic subjects with men and women trained in this particular field.

REPORT BIRTHS PROMPTLY

The public health laws require the attending physician to report births to the local registrar within ten days. Delay in filing birth certificates means that parents do not receive the notification of the child's birth as promptly as the law contemplates.

Past years have conclusively demonstrated to health authorities the need for registering births and deaths. Future years will bring an even greater demand for the certificates. A record of birth is required upon entrance to school and is needed to prove dependency to collect social security, veterans administration, and other federal claims. It is also used to prove age for obtaining driver's permits, the right to vote, and the right to marry.

Vital records are used by health authorities, both state and national, to determine public health needs. Without knowledge as to where and what extent public health problems exist, an effective health program cannot be conducted.

According to Dr. N. H. Dyer, state health commissioner, 42 per cent (4,801) of the births recorded in August, 1948, were for births prior to that month.

The division of vital statistics needs the help of the doctors of West Virginia in keeping current records of births, and we suggest that all doctors endeavor to report births to the local registrar within the time limit prescribed by law.

NUTRITION IN DIABETES

The aim of nutrition in diabetes should be twofold: first, to control and ameliorate the disease; and secondly, to prevent or delay as far as present knowledge permits, the complications of the disease.

Regarding the first aim, it has long been known that tolerance to glucose could be increased in diabetic patients simply by adequate control of carbohydrate metabolism with insulin and a proper diet. Opinions have varied as to what constitutes a proper diet, but most observers are now agree that it should vary little from the dietary standard of normal people.

There is a tendency at present to prescribe a somewhat lower carbohydrate and total caloric intake than normal to avoid obesity, reduce insulin requirement, and facilitate regulation; however, the greater caloric needs of growing children and active adults are being recognized.—Kendall Emerson, Jr., in Nutrition Review.

General News

COUNCIL BACKS CHARLESTON LOCATION FOR PROPOSED MEDICAL-DENTAL SCHOOL

The establishment of a four-year school of medicine and dentistry in Charleston received the unanimous support of the Council of the West Virginia State Medical Association at a meeting at Charleston on October 14. Previously, the Fact Finding and Planning committee and the Legislative committee, at a joint meeting in Parkersburg on October 10, had unanimously voted in favor of the Charleston location. This action followed months of study and careful planning by members of the two committees.

The plan outlined would provide for the graduation annually of fifty doctors and twenty-five dentists. The school, which would supplant the present two-year school of medicine at Morgantown, would be under the supervision and control of the board of governors of West Virginia University.

Hospital and School of Nursing

The Council directed the chairman, Dr. Wade H. St. Clair, of Bluefield, to appoint a committee to appear before the Board of Public Works to ask for an appropriation of $3,800,000 from surplus state funds for the construction of a 200-bed chronic diseases hospital and a school of nursing. The University budget, released October 12, carries an item of $2,000,000 for a medical school. The Council voted to ask that this item be increased to $2,500,000, the amount now estimated to be necessary for the building of a medical-dental school.

Special Committee Named

Doctor St. Clair named as members of this special committee, Dr. D. A. MacGregor, of Wheeling, chairman; and Drs. Thomas Bess, Keyser; Thomas G. Reed, Charleston; Frank V. Langfitt, Clarksburg; Thomas L. Harris, Parkersburg; Walter E. Vest, Huntington; and Frank J. Holroyd, Princeton.

The committee was directed to have an enabling act drafted for introduction at the 1949 session of the legislature, creating the new four-year school, and designating Charleston as the location.

Charleston Site Approved

Charleston was given favorable consideration by the Council as the site of the new medical school on account of taking advantage of the clinical and teaching facilities available in that area. Another determining factor was the offer of the executive committee and self-perpetuating board of trustees of Charleston Memorial Hospital to make available its full facilities for these purposes. It is expected that the first unit of this new hospital will be built in 1949. At the present time, there are sufficient hospital beds in the Charleston area to meet the requirements in connection with an enrollment of 300 medical and dental students.

Another argument in favor of Charleston is the fact that there is sufficient available ground adjoining the

tract of land now owned by Charleston Memorial Hospital that may be purchased at what is considered a reasonable price for use in connection with the construction of the school plant, chronic diseases hospital, and school of nursing.

Already, nearly $3,000,000 is available for the construction of the first unit of the Charleston Memorial Hospital. It is expected that additional funds will be made available annually for the next four years from West Virginia's allotment under the provisions of the Hill-Burton act.

Under the plan adopted by the Council, the chronic diseases hospital and the school of nursing would be state-owned and state-maintained, and placed under the supervision of a state board.

Support for School

There has been considerable agitation for a four-year school among state doctors and dentists for the past several years. Dr. Thomas Bess, of Keyser, president of the State Medical Association, has carried the campaign for a four-year school to every part of the state since he assumed office last January. In this campaign he has been joined by Dr. Thomas G. Reed, the president elect.

Both major political parties have planks in their platforms advocating the establishment of the school, and both candidates for Governor have personally approved the project. It also has the full approval and support of Governor Clarence W. Meadows.

Heavy Pre-Med Enrollment at WVU

The need for the school has been more apparent this year than ever before. There are 436 students taking pre-medical and 93 pre-dental work at the University during the current semester. There were 181 applications for enrollment in the medical school for the semester beginning in September, 1948. Only 30 of this number could be accepted. Over 600 applications for enrollment in the medical school are on file from students residing in other states.

STATE HEALTH DEPARTMENT CHANGES

Dr. T. E. Hynson, of the USPHS, has been assigned to the West Virginia state department of health as acting director of the bureau of venereal disease control. He will also serve as medical officer in charge of the Rapid Treatment Center, in South Charleston. He succeeds Dr. Andrew P. Sackett who was transferred from West Virginia last May.

Doctor Hynson came to West Virginia from Norfolk, Virginia, where he has been Medical Officer in Charge, at Hampton Roads Medical Center, in that city.

Dr. L. W. Frame, of Morgantown, has been named director of the division of communicable diseases. He succeeds Dr. R. E. Gibson, who resigned more than a year ago.

Doctor Frame served as health officer, 1936-1937, in charge of district No. 1, with headquarters at Sutton. He recently has been serving as director of the southwestern branch office of the Indiana state board of health.

SOLONS TO BE GIVEN REORGANIZATION PLAN FOR STATE HEALTH DEPARTMENT

Complete reorganization of the state department of health is contemplated in the plan adopted unanimously by the Council at the meeting held in Charleston, October 14.

The program provides for the creation by the legislature of a state board of health, to be composed of professional and lay people. This board would assume most of the duties of the present public health council. The plan provides for the creation of a medical licensing board to supplant the present public health council. This board would have complete charge of all matters pertaining to licensure in West Virginia.

It is proposed that all bureaus and divisions concerned in any way with public health in this state be placed under the supervision of the state health department. This would include the crippled children's division of the department of public assistance. Full medical and administrative supervision of state tuberculosis and mental institutions would also be assumed by the department.

The proposed state board of health would have powers similar to those now vested in the board of governors of West Virginia University. The board would employ a full time director of health whose duties would be comparable to those of our present state health commissioner.

The Association's legislative committee was directed to sponsor the proposed reorganization bill at the forthcoming session of the legislature.

State Health Department Budget

The Council also unanimously approved the budget prepared by Dr. N. H. Dyer, state health commissioner, for submission to the budget director and the board of public works. In this budget, a substantial increase in funds is asked to provide for additional and improved public health service in every part of West Virginia. The loss of heads of key divisions and health personnel during the past two years, principally due to inadequate salaries, was cited as one of the principal reasons for the proposed increase in funds appropriated for public health.

DR. VEST REELECTED TO C.M.A.B. COMMITTEE

Dr. Walter E. Vest, of Huntington, editor of the West Virginia Medical Journal, has been reelected by the Board of Trustees of the A. M. A. as a member of the advisory committee of the Cooperative Medical Advertising Bureau. He will serve for an additional term of four years.

The bureau handles most of the national advertising accounts for 35 affiliated state medical journals.

AMERICAN ACADEMY OF GENERAL PRACTICE

The first annual scientific assembly of the American Academy of General Practice will be held at the Netherland-Plaza Hotel, in Cincinnati, March 7-9, 1949.

COUNCIL CLEARS HEAVY CALENDAR AT FALL MEETING IN CHARLESTON

The regular fall meeting of the Council of the West Virginia State Medical Association was held at Charleston, October 14. Besides taking action in the matter of the establishment of a four-year school of medicine of West Virginia University and the reorganization of the state health department, the Council went on record as favoring the enactment of legislation requiring the biennial registration of all doctors practicing in this state.

Under the proposed plan, each doctor would be required to register every two years, and a wallet-sized registration card would be provided for the personal use of each individual doctor. The registration period would be from July 1 to June 30 of the second year following.

The reason assigned for this legislative proposal is the fact that at the present time there is no information concerning the number or names of doctors practicing in this state who are not members of the State Medical Association.

Section on Orthopedic Surgery

The creation of a section on orthopedic surgery was approved, and the matter will be passed along to the House of Delegates for action at the annual meeting at White Sulphur Springs in August, 1949.

Secretaries' Conference

The Council voted to sponsor a secretaries conference, which will be held at Charleston sometime in December or January. The secretary of each component society will be asked to attend.

Convention Registration Fee

Taking official cognizance of the lack of facilities for scientific and technical exhibits at the 1949 convention, and the resulting heavy loss of revenue, the Council voted unanimously in favor of a registration fee of $10.00 for each member attending the convention.

Relief Doctors

Approval of the efforts of the public health council to provide ways and means for relief doctors to serve in industrial areas, was voted by the Council. The PHC, it was reported, is now endeavoring to formulate regulations whereby unlicensed residents in approved hospitals may accept relief employment in coal mining communities, where the doctor shortage is so badly felt. Under the proposed plan, temporary licenses would be granted by the PHC to residents accepting such employment.

Non-Profit Plans

A committee composed of Drs. Harold Van Hoose, T. M. Barber, and A. R. Sidell, was named to make a study of existing non-profit hospital and medical service plans to ascertain whether or not all of the plans which have component society approval should now have the full approval of the Council.

Honorary Members

The following doctors were elected to honorary lifetime membership: W. C. Moser, Morgantown; I. T. Peters, Princeton; E. R. Cooper, Troy; and E. E. Shafer, Huntington.

Affiliote A. M. A. Fellowship

Drs. John E. Offner, Joseph C. Peck, and H. E. Gaynor, now honorary lifetime members, were nominated by the Council for affiliate fellowship in the American Medical Association.

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44 HOSPITALS LICENSED

A total of 44 West Virginia institutions caring for the ill and injured have already been licensed by the bureau of hospitals and medical care of the state health department under the new hospital licensing law. There are 130 such institutions within the state. Of this total number, 86 are general hospitals, 3 orthopedic, 14 offices and clinics in doctors' quarters, and 27 nursing homes.

According to Dr. N. H. Dyer, applications have been received from all known institutions in West Virginia. All of the institutions have been inspected by representatives of the fire marshal's office and the state health department. Processing of applications and inspection forms is time-consuming, and there has necessarily been some delay in issuing licenses.

The new law provides that all institutions known as general hospitals must have registered nurses, adequate equipment, including a laboratory approved by the state hygienic laboratory, adequate facilities for preparing food, and proper sanitation. These hospitals must be prepared to take care of all types of major surgery and illness.

Doctor Dyer has stated that many fire hazards have already been eliminated as a result of inspections made under the provisions of the hospital licensing law.

OVER THE TOP

Over 600 West Virginia doctors have applied for group health and accident insurance under the Continental Casualty plan being sponsored by the State Medical Association, and the master policy, according to state representatives of the insurance company, becomes effective November 1. To be exact, 624 members of the Association have qualified for insurance. The minimum number required was 600.

The plan is still open, and members who can produce evidence of insurability may still file application for participation in the plan, which has the full endorsement of the State Medical Association.

Inquiries should be addressed to J. Banks Shepherd, Continental Casualty Company, Kanawha Valley Building, Charleston, West Virginia.

CEREBRAL PALSY CLINIC OPENED BY KANAWHA GROUP IN CHARLESTON

A clinic for children with cerebral palsy was formally opened September 25 at Charleston under the sponsorship of the Kanawha County Society for Crippled Children and Adults. The clinic, which is being held in the Kanawha-Charleston Health Department clinic rooms, in the City Building, is open from 9:00 A. M. to 4:00 P. M. every other Saturday, but it is expected that arrangements will be made soon to hold the clinic at least once each week.

Approximately fifteen children are being given treatment at the present time, but every effort is being made to expand facilities so that treatment for additional children may be provided. Each child accepted will attend the clinic until the medical advisory board feels that the parents can continue the treatment at home.

An orthopedist, a pediatrician, a physical therapist, an occupational therapist, and a speech therapist are in attendance at each session. Members of the advisory board alternate in supervising the work.

Miss Nancy Sehmann, of the DPA, is serving as physical therapist, and Mrs. Lilly Tjomsland supervises speech therapy through the cooperation of the Kanawha County Board of Education. Miss Willo Ann Rayburn, of Morris Memorial Hospital, Milton, is serving as occupational therapist.

The medical advisory board is composed of Dr. Randolph L. Anderson, Chairman; and Drs. E. Bennette Henson, H. M. Hills, Jr., Harold H. Kuhn, George Miyakawa, Claude B. Smith, Howard A. Swart, Lloyd E. Cox, Mary Virginia Gallagher, Henrietta L. Marquis, A. A. Shawkey, Wm. B. Rossman, and Archer A. Wilson, all of Charleston.

The West Virginia Department of Public Assistance, the Kanawha County Board of Education, the Parents Council (parents of cerebral palsied children), the American Business Club, Alpha Chi Omega, and other interested groups are cooperating actively with the Crippled Children's Society in the work of the clinic.

ACADEMY ELECTS

Dr. Sobisca S. Hall, of Clarksburg, was named president of the West Virginia Academy of Ophthalmology and Otolaryngology at the annual fall meeting held at The Greenbrier at White Sulphur Springs, September 20-21. Other officers were named as follows:

First vice president, Dr. G. P. Morison, Charles Town; second vice president, Dr. Charles St. Clair, Bluefield; secretary, Dr. Melvin W. McGehee, Huntington; and treasurer, Dr. F. C. Reel, Charleston.

The 1949 meeting of the Academy will be held at Martinsburg, in May. The regular fall meeting will be held at White Sulphur Springs, August 4-6, in connection with the annual meeting of the West Virginia State Medical Association.

The Virginia Wing of the Greenbrier at White Sulphur Springs, where the 82nd Annual Meeting of The West Virginia State Medical Association will be held August 4-6, 1949.

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AMA INTERIM SESSION IN ST. LOUIS

The program for the interim session of the American Medical Association, at the Kiel Auditorium, in St. Louis, has been completed. The session will open Tuesday, November 30, and continue through Friday, December 3.

The scientific program will begin Tuesday afternoon, and will be followed by clinical presentations, many of them with patients, which will be conducted in rooms in the scientific exhibit hall. Exhibits pertaining to the clinical presentations will be shown in areas outside each room. The same procedure will be followed each morning and afternoon.

Television programs will be presented continuously through the cooperation of the St. Louis University School of Medicine and Washington Universtiy School of Medicine. These programs will be in charge of the Rev. Alphonse M. Schwitalla and Dr. Robert A. Moore, of St. Louis.

The programs have been designed especially for general practitioners, and scientific exhibits are being carefully chosen with the idea of interesting doctors in general practice.

The interim session of the AMA House of Delegates is scheduled for Monday and Tuesday, November 29-30, and the annual meeting of secretaries and editors will be held on Sunday, November 28.

A nationwide meeting on public relations under the auspices of the American Medical Association, will be held in St. Louis, on Saturday afternoon, November 27.

DIET AND CANCER

There has been much talk about diet and cancer. Almost every type of food has been blamed by the public for the origin of cancer. So far as is now known, diet has no effect on the incidence of human cancer.—Herman L. Kretschmer, M. D., in Illinois Medical Journal.

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WEST VIRGINIA DOCTORS AND WIVES ON SOUTHERN MEDICAL PROGRAM IN MIAMI

Several West Virginia doctors took an active part in the 42nd annual meeting of the Southern Medical Association at Miami, Florida, October 25-28.

Dr. James R. Bloss, of Huntington, President of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, presented a paper at the general public session on October 26. His subject was, "A Consideration of Some Recent Advances in Obstetrics and Gynecology." Dr. T. Kerr Laird, of Montgomery, appeared on the program of the Section on Surgery, held October 27. He spoke on "Surgical Emergencies Resulting From Anomalies of the Small Bowel."

In the Section on Proctology, Dr. Chesterfield J. Holley, of Wheeling, participated in the discussion on Dr. Mark M. Mark's paper on "Correction of Painful Sacral Scars."

A scientific exhibit, "Sitz Bath for Post-Operative Perineal Care," was shown by Dr. A. P. Hudgins, of Charleston.

Dr. Robert J. Wilkinson, of Huntington, chairman of the committee on revision of the constitution and by-laws, presented his annual report at the general session held Wednesday evening, October 27. Dr. Andrew E. Amick, of Lewisburg, member of the Council, attended the meeting called for Sunday, October 24.

Dr. N. H. Dyer, of Charleston, state health commissioner, is vice chairman of the Section on Public Health which met on the afternoon of October 27. Dr. J. J. Brandabur, of Huntington, is secretary of the Section on Industrial Medicine, which scheduled a meeting for October 26.

The wives of West Virginia doctors also took an active part in the 24th annual meeting of the Woman's Auxiliary to the Southern Medical Association. Mrs. Ulysses G. McClure, of Charleston, chairman of the budget committee, submitted her annual report at a meeting held October 27. Courtesy resolutions were prepared and offered by Mrs. W. E. Hoffman, of Charleston, president of the Auxiliary to the West Virginia State Medical Association.

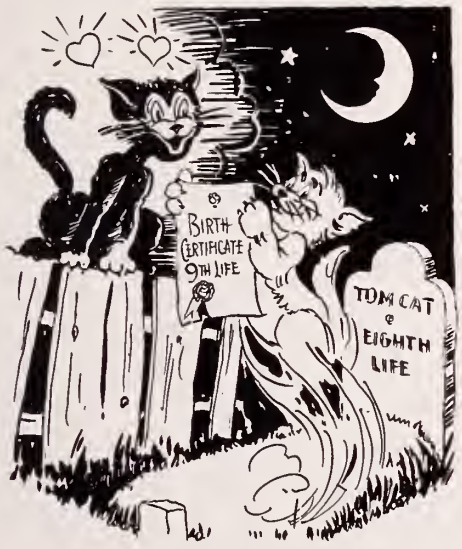
Mrs. Ralph S. McLaughlin, of Charleston, is a member of the Council of the Southern Medical Auxiliary, and West Virginia has had one president, Mrs. John P. Helmick, of Fairmont, who served in 1944-45.

RELOCATIONS

Dr. L. E. Dunman, who has been engaged in industrial practice at Gary, is taking a postgraduate course in internal medicine at the Graduate School of Medicine, University of Pennsylvania, Philadelphia.

* * * *

Dr. Donald K. McIntyre, of Berkeley Springs, has moved to Bolivar, where he will continue in general practice.



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CABELL HEALTH UNITS MERGE

The final step in the merger of the health units in Cabell County and the city of Huntington was taken late in September, when the city council voted unanimously in favor of the merger combining the services. The county court of Cabell County had previously approved the project.

A director for the new unit will probably be appointed sometime during October. The salary has been fixed at $8,400 per annum.

HOPEMONT HEAD NAMED

Dr. A. L. Starkey, who for many years has served as assistant superintendent of the Hopemont Sanitarium, has been named acting superintendent to succeed Dr. David Salkin, effective October 1.

Doctor Salkin resigned as superintendent to accept the office as clinical director at the Veterans Administration Hospital, in San Fernando, California.

GRADUATE PUBLIC HEALTH SCHOOL AT PITT

Dr. Thomas Parran, former surgeon general of the USPHS, has been named dean of the new graduate school of public health at the University of Pittsburgh. He has assumed his new duties and an effort is being made to open the school during the present year.

The University has accepted a gift of $13,600,000 from the A. W. Mellon Educational and Charitable Trust for the graduate school. The initial endowment is $4,000,000, and the balance of the gift will be allocated over a five-year period.

INTERNATIONAL COLLEGE OF SURGEONS

The 13th annual assembly of the United States Chapter of the International College of Surgeons is scheduled for St. Louis, November 15-20, 1948. A copy of the preliminary program may be obtained by writing to Dr. R. M. Klemme, Chairman of the Assembly, 4952 Maryland Avenue, St. Louis.

Dr. John E. Cannady, of Charleston, is one of the vice presidents of the United States Chapter.

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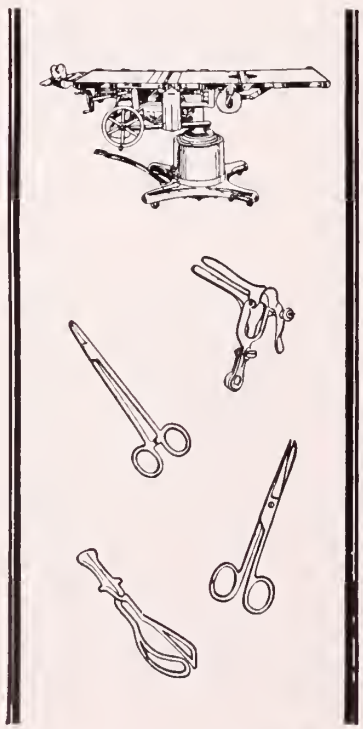

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AM. ACAD. DERMATOLOGY AND SYPHILOLOGY

The seventh annual meeting of the American Academy of Dermatology and Syphilology will be held at the Palmer House in Chicago, December 4-9. Special courses in histopathology and mycology will be given at the schools of medicine at the University of Illinois and Northewestern University, and teaching clinics are scheduled for the afternoons of December 6-7-8. The meeting follows the Interim Session of the AMA at St. Louis, which is scheduled for Nov. 30-Dec. 3. Full information concerning the program may be obtained by writing to Dr. Earl D. Osborne, Secretary, 471 Delaware Avenue, Buffalo, N. Y.

SICK CHILDREN

Sick children present a two-fold problem in respect to growth and maintenance of body tissue: (1) repair of the damage wrought by disease, and (2) provision of the nitrogen needed for the growth processes, which persist in their demands during periods of illness. Hence, the physician may wish to prescribe large amounts of protein. Protenum is a highly palatable high protein food—low in fat. In the form of a beverage or in various recipes, it will increase the protein intake without adding appreciable bulk to the diet.

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80,000,000 COVERED BY HEALTH INSURANCE

It is conservatively estimated that there are over eighty million voluntary agreements in effect providing benefits against the financial hazards of disability, hospitalization, surgical and medical care: thirty million in Blue Cross, ten million by early 1949 in medical society programs, and some forty million additional Americans covered by some form of sickness and health benefit insurance.

The Council intends to continue to exert every effort eoward the promotion of voluntary health insurance as opposed to compulsory sickness insurance by backing to the limit and maintaining the integrity and independence of these state plans.—AMA Council on Medical Service.

DECREASE IN SYPHILIS DEATH RATE

Reported death rates from syphilisi n the continental United State have been steadily reduced since the passage of the National Venereal Disease Control Act in 1938. This trend is considered to be highly reliable, since known factors (aging of the population and redefinition of aneurysm) and probable improved reporting by physicians have all exerted an upward force on the rate during this period. In spite of this, the observed trend is downward.—Harold A. Kahn and Albert P. Iscrant in J. Veneral Disease Information.

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VITAL STATISTICS REPORT

The infant death rate in West Virginia showed an approximate increase of 12 per cent in August over the corresponding month last year, with a rate of 40.5 per 1,000 live births. Premature birth was the leading cause of infant deaths, 71 infants dying from this cause alone during August, 1948.

For the first 8 months of 1948, 1,327 infant deaths were reported to the state department of health, an increase of 42 over the same period in 1947, while the number of births recorded is 2,174 less than during that period last year. The rate, 41.8 per 1,000 live births, was considerably higher than the rate of 38.6 for last year.

The 4,696 births reported for August this year exceeded any month since September, 1947, when 4,951 births were registered. The birth rate for the month of August, 1948, was 10 per cent higher than for August last year.

The total number of births for the first 8 months was 31,756, only 2,174 less than the number reported during the January-August period last year when for the first time since records have been kept the number of births in West Virginia exceeded 50,000.

The death rate for August this year was 9.0 per 100,000 population, which is higher than the rate of 8.3 per 100,000 for August, 1947.

Of the 11,365 deaths recorded for the state so far this year, 27.1 per cent were due to heart disease. This is by far the leading cause of death in West Virginia. The 3,076 deaths reported from diseases of the heart for the period January-August, 1948, is an increase of 6.3 per cent over the number reported for the same period last year.

HEALTH OFFICERS APPOINTED

At the meeting held in Charleston, October 4, the public health council confirmed the appointment of the following part-time health officers: Lincoln county, Dr. G. O. McClellan, West Hamlin; Greenbrier, Dr. H. B. Strader, White Sulphur Springs; Tucker, Dr. Guy H. Michael, Parsons; and Morgan, Dr. G. P. Morison, Charles Town.

AUNT MATILDA TASTED FINE

My daily maid turned up the other day all smiles and happiness. A long-forgotten relative in Australia had sent a food parcel, and she and her sister had enjoyed the first meal. The parcel had been badly knocked about and one cardboard box seemed to have no label. It contained a brownish powder, and since there were other packages of dried beef and the like they assumed the powder was some Australian kind of Bisto. So they sprinkled it on the dried beef and cooked it. They thought the flavour was fine. But the letter which arrived later produced nausea, anorexia, and other psychosomatic symptoms. It said they should take great care of the little brown box as Aunt Matilda had recently died and they were sending along a third share of the ashes.—Lancet.

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Book Reviews

MODERN CLINICAL PSYCHIATRY—By Arthur P. Noyes, M. D., Supt. Norristown State Hospital, Norristown, Pa. Third Edition. Pp. 535. Philadelphia and London. W. B. Saunders Co. 1948. Price $6.00.

The author of this book has long been known as a teacher and physician well versed in the subject of nervous and mental diseases. In this edition, which follows the previous edition by a period of eight years, the author has attempted successfully to present a fair picture of the advances that have been made in the subject of psychiatry during that period of time.

In recent years the subject of psychiatry has received a great deal of emphasis in the press as well as in the professional fields. Psychosomatic medicine has had it's growth within recent years and it is based upon psychiatric application to the treatment of illnesses brought on largely by emotional problems and characterized by somatic complaints. This is psychiatry under a new name and divorced from the mental hospital field.

Dr. Noyes has taken into consideration the fact that there is an extensive need for psychiatric understanding and application in the general practice of medicine and surgery and he has attempted in this edition to present the subject in such a manner that any physician will be able to understand and make some application of the principals underlying this understanding of practical psychiatry. The reader must keep in mind the fact that the author has approached the subject from the psychobiological aspect. Psychobiology is one of the schools of psychiatry which has grown up as a result of the teaching of Dr. Adolph Myer and his co-workers, whose extensive observations have been recorded in their various writings.

In the field of psychiobiology, while the constitutional aspects of disease are given adequate consideration, emphasis is placed upon the day by day experiences of the individual in his various contacts and of the effects of these experiences upon his personality development.

Cosmic influences, subhuman contacts, variations in the climatic factors, successes and failures of the individual in his efforts to meet competition, frustrations, the influences of companions and the inpingement of the numerous factors that would influence the emotional tone along with the state of the organism and, perhaps numerous other factors, all play a part in the process of the psychobiological development of the individual. Dr. Noyes has undertaken to include in his considerations these various elements. He has also, in order to avoid too much narrowness in his approach, introduced limited discussions of other fields of thought including some of the concepts of the Freudian psychoanalytic school.

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The book is well written, well printed, compact, readable and understandable. It is recommended for reading by the general practioner of medicine and surgery, as well as the student who is interested in the particular field of psychosomatic medicine and psychiatry.—Edward F. Reaser, M. D.

* * * *

CORRELATIVE NEUROANATOMY—By Jos. J. McDonold, M. D., Jos. G. Chusid, M. D., and Jock Longe, M. D. Fourth Edition. Pp. 156, with 60 illustrations University Medicol Publishers, Palo Alto, Cal. 1947. Price $3.00.

This 150-page book presents in outline form the anatomy and physiology of the nervous system, neurological diagnosis, and the diseases of the central nervous system. It will be useful to the student reviewing for an examination, and to the practioner who wishes a quick and concise presentation of anatomic or clinical detail. It does not attempt to replace the standard texts. A valuable feature is the addition of references to standard texts at the end of each section. There is an index adequate for a book of this type.—J. J. Lawless, M. D.

* * * *

PLANNING YOUR EXHIBIT—By Janet Lane ond Beatrice K. Tolleris. Pp. 29, with 12 illustrations. National Publicity Council, 130 E. 22nd St., New York 10, N. Y. 1948. Price $1.00.

PLANNING YOUR EXHIBIT sets out to save time, money and waste motion for the educators and public relations people who plan to use store windows booths, waiting rooms or meeting rooms as part of their information programs.

From the very beginning, it helps clarify the reader's thinking, by pinning him down to the specific advantages and pitfalls of the exhibit method as applied to his message and his partciular audience.

This lively how-to-do-it analyzes such display techniques as the use of photographs, live demonstrations, objects, and audience participation devices. It hits hard at basic principles, emphasizing clarity, simplicity, the use of strong lines, bright colors and the fewest possible elements.

Professional tips on how to meet competition from other windows or booths, which mechanical factors to consider (space, electric outlets, fire regulations, etc.) and which display materials lend themselves best to which purposes make this manual as practical as it is stimulating.

On the idea side, it offers 12 ilustrations of successful exhibits sponsored by health and welfare agencies, plus countless other suggestions for adapting basic exhibit plans to particular situations.

With its easy, readable style and thoroughgoing analysis of its subject, PLANNING YOUR EXHIBIT is a sure-fire shortcut for the non-professional exhibitor.

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THE NEW MALE LOOK

This new impulse towards brightening our homes and persons is disquieting to sober conservatives like me. I suppose the urge started with women; after seeing the New Look (which gives them an old one) I can believe almost anything of the other sex. Not that men are altogether guiltless. There's that little matter of the patterned American ties, already mentioned in these columns.

I've always thought that men's clothes should be so quiet that nobody notices them. With these ties that's impossible; they yell at you. I own that I sometimes regret that I haven't a personality that could stand up to such a tie; I confess, too, that I have sourly envied the owners of these ties, their American dollars or their American friends. But despite this emotional tinge I stand four-square by my principles—or did until the other night.

I was invited to a private party in honour of a much loved American orthopaedist. After our meal he made a little presentation to five British colleagues as a memento of their visit to him last year. The box was undone; and there, in vivid argument, were the five loudest ties in creation. The ties were donned. Do you know, they were actually very smart; and I felt dim and shabby. Anyone wanting a nice Paisley pattern in exchange for a quarrel-some multihued tie should get in touch with me. Only one thing worries me: surgeons, with their robust extroversion, can wear them all right, but can the physician with his more subtle and refined nature? We shall see. Meanwhile, I attract all eyes with the yellow waistcoat I bought this morning.—The Lancet.

HELPFUL UNDERSTANDING

It may be well to keep in mind that any ill patient from whatever cause, is facing the result of fear of his illness, whether conscious or not, as well as the necessity for adjustment to a new and strange situation, with the threat of not only physical and mental but also economic insecurity. Any physician, wherever he may be practicing, is definitely more helpful to his patient when he demonstrates some understanding of the psychological factors involved during a physical illness.

Every thoughtful physician can readily acquire the art of seeing through the eyes of his patient the specter of disability, even if temporary, and the emotional consequences reacting through the patient and members of his family. Some of these, often barely noticed factors, may influence the nature and duration of the illness very materially and can be tremendously relieved by a physician who takes time to understand.—Baldwin L. Keyes, M. D., in J. Kansas Med. Soc.

FOOD HANDLERS AND TB

Philadelphia, which claims to be the only city requiring X-ray examination of food handlers, has separated 79 tubercular persons from their jobs, and is keeping an eye on seven hundred arrested cases.—News Letter, Am. Coll. Radiology.

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County Society News

CABELL

Dr. Maurice G. Buckles, of Louisville, Kentucky, presented an interesting paper on "Developments in Chest Surgery," at the regular monthly meeting of the Cabell Medical Society, held October 14, at the Hotel Prichard, in Huntington.

THOMAS B. BAER, M. D.,
Secretary.

* * * *

CENTRAL WEST VIRGINIA

Dr. R. J. Condry, of Elkins, was the guest speaker at the fall dinner meeting of the Central West Virginia Medical Society, held September 16, at the Buckhannon Country Club in Buckhannon. His subject was "Cardiac Emergencies."

The speaker discussed paroxysmal tachycardia, fibrillation and flutter, and coronary thrombosis, together with diagnosis and treatment. He also discussed complete heart block, with particular reference to acute left ventricular failure.

Doctor Condry's paper was discussed by Drs. J. M. Cofer, J. C. Huffman, and others.

At the business meeting preceding the scientific program, Dr. W. W. Huffman, of Gassaway, was elected president for 1949. Dr. George D. Hill, of Camden-on-Gauley, was elected vice president, and Dr. Theresa O. Snaith, of Weston, secretary-treasurer. Dr. Snaith succeeds Dr. J. M. Cofer, of Bergoo, who has served in this capacity for the past seven years.

It was announced that the next quarterly meeting of the society will be held at Weston, and the following entertainment committee was appointed to arrange for the meeting: Drs. C. R. Vavisson, J. L. Knapp, and O. W. Corder, all of Weston.

Dr. John E. Echols, president of the society, presided as chairman at the meeting, which was attended by over fifty doctors, members of the auxiliary, and guests.

J. M. COFER, M. D.,
Secretary.

* * * *

FORT HENRY ACADEMY

Dr. A. Carlton Ernstene, cardiologist and head of the department of medicine at the Cleveland Clinic, was the guest speaker at the September meeting of the Fort Henry Academy of Medicine, held at Wheeling. He presented an interesting paper on "Recent Advances

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SURGERY—Intensive Course in Surgical Technique, Two Weeks, Starting November 29, January 24, February 21.
Surgical Technique, Surgical Anatomy & Clinical Surgery, Four Weeks, Starting November 8, February 7, March 7.
Surgical Anatomy & Clinical Surgery, Two Weeks, Starting November 22, February 21, March 21.
Surgery of Colon & Rectum, One Week, Starting March 7, April 18.
Surgical Pathology Every Two Weeks.

GYNECOLOGY—Intensive Course, Two Weeks, Starting February 21, March 21.
Vaginal Approach to Pelvic Surgery, One Week, Starting February 14.

OBSTETRICS—Intensive Course, Two Weeks, Starting March 7.

MEDICINE—Intensive Course, Two Weeks, Starting April 4.
Personal Course in Gastroscopy, Two Weeks, Starting April 18.

DERMATOLOGY—Formal Course, Two Weeks, Starting April 18.
Clinical Course Every Two Weeks.

CYSTOSCOPY—Ten Day Practical Course Every Two Weeks.

ROENTGENOLOGY—Lecture and Diagnostic Course, Two Weeks, Starting the First Monday of Every Month.
Clinical Course Starting the Third Monday of Every Month.

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in the Treatment of Heart Disease." Discussion was opened by Drs. H. B. Sauder and R. U. Drinkard, of Wheeling.

At the business meeting following the scientific program the following officers were elected for the ensuing year: President, Dr. William M. Sheppe, Wheeling; vice president, Dr. H. B. Ashworth, Moundsville; secretary-treasurer, Dr. D. E. Greeneltch, Wheeling; and chairman program committee, Dr. E. V. Arbaugh, Jr., Martins Ferry, Ohio.

D. E. GREENELTCH, M. D.,
Secretary-treasurer.

* * * *

KANAWHA

Dr. E. A. Davis, of Charleston, was the guest speaker at the regular monthly meeting of Kanawha Medical Society, held October 12, at the Daniel Boone Hotel, in Charleston. His subject was "Medical Ethics and Courtesy."

Prior to the scientific session, Ciba's film on Leukorrhea was shown.

At the business meeting following the scientific program, Dr. Geo. Wm. Hogshead, of Nitro, was elected to membership in the society.

THEODORE P. MANTZ, M. D.,
Secretary.

* * * *

MERCER

Dr. Reno R. Porter, of the Medical College of Virginia, Richmond, was the guest speaker at the regular monthly meeting of the Mercer County Medical Society, held September 16, at the Pinnacle Restaurant, in Bluefield. His subject was "Congenital Heart Disease."

At the business meeting following the scientific program, Dr. Harris Preston Pearson and Dr. Roy E. Christie, of Bluefield, were elected to membership in the society.

A committee Composed of Drs. Upshur Higginbotham, E. L. Gage, and Richard C. Neale was appointed to make a study of the group insurance policy carried for the members of the Mercer County Medical Society.

FRANK J. HOLROYD, M. D.,
Secretary.

* * * *

OHIO

At a business meeting of the Ohio County Medical Society held September 21, at Wheeling, the following doctors were elected members: Philip Lesley Azar, George Mathew Kellas, and Warren D. Leslie, all of Wheeling.

PAUL V. GRAHAM, M. D.,
Secretary.

* * * *

RALEIGH

Dr. Joseph Webb, medical director of the C. & O. Hospital, Huntington, was the guest speaker at the regular monthly meeting of the Raleigh County Medi-

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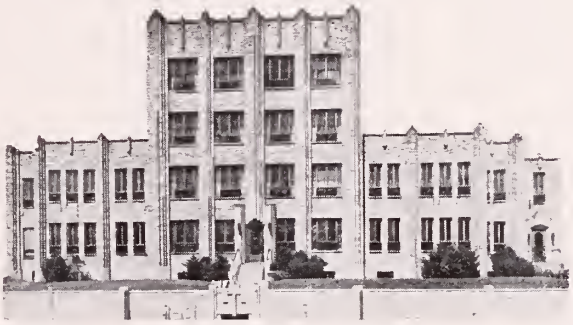

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HU C. MYERS, M. D.
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EDNA MYERS JEFFREYS, M. D.

Anatomic Pathology:
S. D. WU, M. D.

Internal Medicine:
IRVING J. HANSSMANN, M. D.; JOHN E. LENOX, M. D.

Resident Staff:
A. KYLE BUSH, M. D., Surgery
CORA C. LENOX, M. D., Medicine
MELVIN E. LEA, M. D., Surgery

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☆ ☆ ☆

PHILIPPI, WEST VIRGINIA

DIAGNOSTIC AND THERAPEUTIC FACILITIES AT THE DISPOSAL OF ALL QUALIFIED PHYSICIANS

cal Society, held September 16 at the El Chico Cafe, in Beckley.

Discussing "Diagnosis of Liver Diseases by Needle Biopsy", the speaker pointed out that resort should be made to such biopsy in many liver conditions where clinical examination and present laboratory tests do not substantiate diagnosis.

At the business meeting preceding the scientific program, Dr. W. A. Dorsey and Dr. E. H. Willard, both of Beckley, were elected members of the society, and Dr. E. O. Daue, Jr., of Baltimore, was elected a member by transfer from that city.

Dr. H. A. Shaffer presided as chairman of the meeting, which was attended by over forty members and guests.

W. FRED RICHMOND, M. D.,
Secretary.

AN HUNDRED FOLD

Members of the State Medical Association have made an investment, good for mounting dividends throughout the years. The 1948 Public Relations Program is outstanding in conception and scope and it will stand as a challenge to all other states in the union. It has been suggested that members tag each $20.00 invested in other things during the current year and see how the returns, in satisfaction and material dividends, compare with the $20.00 invested in public relations. The officers, council and committees deserve much credit. Give them a hand.—J. Oklahoma State Med. Assn.

NIGHT CALLS

With increasing frequency we see articles in the press, whether justified or not, concerning the inability of patients to obtain medical attention during the night. It must continue to be the privilege of the physician to decline to make night calls, but that does not assume that the family should do without medical aid in an emergency.

Would it not be wise for County Medical Societies to set up a panel of doctors willing to make night calls, make that panel available to a central registry, directory, or county medical office with night help and telephone communication, and then educate the local public concerning this additional medical service?—Harold W. Kohl, M. D., in Arizona Medicine.

UNITED EFFORT NECESSARY

A constructive united effort is necessary for better health for all of us. People want more doctors. Doctors want to preserve the quality of medical care. People want to keep individual initiative and preserve the American way. All of these things will be accomplished, given time. What won't be accomplished is to prove that all of your ideas or mine are correct. We must start right now, as individuals and as a profession, to recognize that individual compromise is necessary. Then, and only then, can we learn to work together in mutual respect and with confidence in each other and the lay public.—Geo. S. Klump, M. D., in Pennsylvania Medical Journal.

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Woman's Auxiliary

CABELL

A tea, sponsored by the Woman's Auxiliary to the Cabell County Medical Society, was held September 28 at the home of Mrs. J. F. Barker, in Park Hills, Huntington. Guests included wives of doctors from Cabell, Lincoln, and Wayne counties, from local hospital staffs, the staff of the veterans administration hospital, and the regional office of the veterans administration in Huntington.

Those in the receiving line included Mrs. Raymond Curry, the president, Mrs. Harlan Stile, vice president, Mrs. James Brown, secretary, and Mrs. Robert Barrett, treasurer.

More than 125 guests were present at the tea.

MRS. GATES J. WAYBURN,
Editorial Chairman.

* * * *

FAYETTE

Mrs. W. E. Hoffman, of Charleston, president of the Woman's Auxiliary to the West Virginia State Medical Association, was the guest speaker at the regular monthly meeting of the Fayette Auxiliary, held October 5, at the home of Mrs. Dewitt Peck, in Montgomery. Other guests included Mrs. U. G. McClure and Mrs. R. S. McLaughlin, both of Charleston.

At the business meeting following the speaking program, the Auxiliary appropriated $25.00 for the purchase of a radio for a veterans administration hospital.

MRS. T. KERR LAIRD,
Secretary.

* * * *

HARRISON

A dinner meeting of the Woman's Auxiliary to the Harrison County Medical Society was held October 7, at the Waldo Hotel, in Clarksburg. Dr. Waitman F. Zinn, of Baltimore, a former West Virginian, was the guest speaker. His topic was "Accidents in the Home," and his paper was illustrated by slides.

During the afternoon preceding the meeting, Doctor Zinn addressed various parent-teacher groups in Clarksburg.

MRS. JOHN THOMAS GOCKE,
Press and Publicity Chairman.

* * * *

KANAWHA

The fall program of the Kanawha Auxiliary was opened with a luncheon and style show at Edgewood Country Club, in Charleston, September 17.

Mrs. John W. Hash, the president, presided at the meeting and conferred honorary lifetime memberships upon Mrs. V. Eugene Holcombe, past president of the American Medical Association Auxiliary, and Mrs. U. G. McClure, past president and now a member of the

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executive board of the American Medical Association Auxiliary.

Over one hundred guests were present, including new members of the Auxiliary and members of the Auxiliary to the Charleston Dental Society.

MRS. HUNTER BOGGS,
Corresponding Secretary.

* * * *

LOGAN

The first fall luncheon meeting of the Woman's Auxiliary to the Logan County Medical Society was held September 17 at the home of Mrs. Walter E. Brewer, in Logan. Mrs. A. M. French was co-hostess at the luncheon, which was attended by about fifteen members and guests.

MRS. J. W. LYONS,
President.

* * * *

MARION

At a meeting of the Marion County Auxiliary, held September 30, at Fairmont, with members of the Harrison and Monongalia Counties Auxiliary as guests, Dr. Roger Scott, of Johns Hopkins Hospital, of Baltimore, was the guest speaker.

Mrs. John Helmick and Mrs. Rush Lambert were in charge of the dinner, and places were set for about 90 members and guests.

MRS. C. M. RAMAGE,
Press and Publicity Chairman.

OHIO

The members of the Woman's Auxiliary to the Ohio County Medical Society were guests at a bridge luncheon held September 15, by the Belmont (Ohio) Medical Auxiliary, at Belmont Hills Country Club, St. Clairsville, Ohio. The honor guests included Mrs. Benjamin Gilette, of Toledo, president of the Auxiliary to the Ohio State Medical Association, and Mrs. C. V. Kirkland, of Bellaire, president elect.

During the luncheon, Mrs. R. U. Drinkard, the retiring president of the Ohio Auxiliary, was presented with a silver vase in recognition of her leadership during the past year.

MRS. C. J. HOLLEY,
Press and Publicity Chairman.

* * * *

RALEIGH

Mrs. W. E. Hoffman, president of the Woman's Auxiliary to the West Virginia State Medical Association, was the guest speaker at the opening fall meeting of the Raleigh County Auxiliary, held October 18, at the home of Mrs. John E. McKenzie, of Beckley. Mrs. Hoffman discussed current problems of interest to the members of the Auxiliary in this state.

MRS. J. E. McKENZIE,
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STREPTOMYCIN IN TUBERCULOSIS

The following report on the use of streptomycin in tuberculosis has been released for publication by the committee on chemotherapy and antibiotics of the American College of Chest Physicians:

Indications for Treatment

Nearly all forms of tuberculosis respond to treatment with streptomycin in some degree. However, the drug should by no means be used indiscriminately.

Pulmonary Tuberculosis

It is extremely difficult to lay down hard and fast rules for the use of streptomycin in pulmonary tuberculosis. Especial care in the selection of cases is necessary. The drug has its greatest usefulness in cases with an appreciable amount of exudative disease. In some other cases streptomycin is responsible for symptomatic improvement and the prevention of complications.

1. Definitive treatment: This category includes chiefly progressive lesions of recent origin with little or no destruction of tissue, such as progressive primary tuberculosis and tuberculosis due to hematogenic and bronchiogenic dissemination.

2. Preparation for surgical procedures, including temporary and permanent collapse and excisional surgery. In some cases pneumothorax can be instituted sooner and with greater safety after a course of streptomycin. Not infrequently the drug is of great value in preparing patients as candidates for thoracoplasty. As prophylaxis, streptomycin should be used routinely in excisional procedures.

It must be emphasized again and again that streptomycin is not a substitute for sanatorium care and other proven procedures. Rather it is a valuable adjunct to these other measures.

Extrapulmonary Tuberculosis

Streptomycin is the only treatment available in miliary tuberculosis and tuberculosis meningitis. In such cases early and intensive treatment is imperative. Streptomycin is the treatment of choice for tuberculosis sinuses, tuberculosis of the oropharynx, larynx and tracheobronchial tree, tuberculosis enteritis and peritonitis, tuberculosis otitis media, and tuberculosis pericarditis. In renal tuberculosis, symptomatic improvement is usually prolonged and bacterial conversion occurs in some cases. Tuberculosis of the bones and joints is often improved by streptomycin but chemotherapy is not a substitute for orthopedic surgery when this is indicated.

Streptomycin is valuable as pre-operative and post-operative treatment of tuberculosis in surgery of the genito-urinary tract, surgery of bones and joints, pericardiolysis, incision and drainage of abscesses and fistuectomy.

Administration

Streptomycin is administered by intramuscular or deep subcutaneous injection. The optimal regimen for the administration of streptomycin has not been determined. In most forms of tuberculosis results appear to

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be satisfactory when a dose of .5 to 1 gram a day is administered in one or two injections for six to eight weeks. With this mode of therapy complications are very infrequent and in most cases their clinical importance may be discounted. In tuberculosis meningitis and miliary tuberculosis treatment should be vigorous; a dose as high as two grams per day for four months, or longer if necessary. In tuberculosis meningitis results seemingly are better when intramuscular injection is supplemented by intrathecal injection of from 25 to 50 milligrams every twenty-four to forty-eight hours for two or three months, or as long as this method of administration is tolerated by the patient.

Since drug fastness is apparently closely related to duration of treatment, regardless of the daily dosage, limitation of the period to a few weeks may be effective in avoiding this phenomenon in many cases.

The physician handling a case of tuberculosis would do well to ask himself the following questions before administering streptomycin.

1. Why is streptomycin being used: for definitive therapy, as preparation for surgery, for prophylaxis, or for relief of distressing symptoms?

2. Is the type of lesion present of such a nature as to warrant the use of streptomycin in addition to other available therapy?

3. Can the purpose of chemotherapy be accomplished within the relatively short period of the drug's effectiveness? (Almost three-fourths of the patients show resistant organisms after three to four months of continuous daily streptomycin treatment).

Other Chemical and Antibiotic Substances

There is no other substance known today which compares with streptomycin in its effectiveness against tuberculosis. The sulfones, promin and promizole, are generally ineffective alone. Experimental work is in process to determine whether or not there is synergistic action when any of these are added to streptomycin. Para-aminosalicylic acid is promising on the basis of laboratory experimentation but sufficient clinical work has not yet been done to permit evaluation of this drug. Subtilin has not had sufficient trial and there is not yet enough animal experimentation to indicate its usefulness. Of the many other antibiotic substances, none has shown in preliminary experimentation indication of real value against tuberculosis and none has had clinical trial.

PUBLIC HEALTH AND PUBLIC RELATIONS

Local public health programs are supplementary and complementary to practicing physicians. There should not, and must not, be any conflict between the two. Public healt his a program in which county medical societies can take positive action and be of fine service to thei rcommunities. This is a nexcellent opportunity for creating good public relations.—Cleon A. Nafe, M. D., in J. Indiana St. Med. Assn.

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THE NATURAL HISTORY AND TREATMENT OF INFECTIOUS HEPATITIS*

By PERRIN H. LONG, M. D.,
Baltimore, Md.

When you look into the subject of infectious hepatitis you will find that it has a very interesting history because it has been associated for a great many years with war. The first really good description of it comes from the British. It has to do with an outbreak which occurred during an attack that the British made on the island of Minorca in the 1700's. Everything was going well. They had besieged the island in the summer and then, in the early fall, jaundice broke out among the troops to such an extent that the siege had to be raised.

Then we find that when Napoleon invaded Egypt the French troops were stricken with jaundice. He attributed it to the high living and venality of the French troops.

Jaundice was one of the leading causes of hospitalization in the Crimean War. I was recently reading some of Florence Nightingale's memoirs and she speaks very frequently of the great number of soldiers who came in with jaundice. Then in our own War between the States we find that one of the greatest causes of morbidity was jaundice. There were more than 30,000 cases registered in the Federal troops. Next, in World War I, we find that in the British force at Gallipoli and in the Middle East jaundice was one of the biggest problems and one of the greatest causes of the loss of manpower. However, none of these things seems to have made much of an impression on American medicine because we apparently paid little attention to them.

I now want to discuss what happened in World War II and the experiences I am going to talk about today are drawn largely from the work of that group of individuals which was headed by Dr. Marion Barker (who very unfortunately died about a year ago) and Dr. Richard Capps, Jr., and indeed of a group of the physicians of the medical service of our various hospitals in North Africa and Italy, all of whom became very much interested in this disease and conducted clinical and experimental studies which have been wider in their scope than any which had been done before.

Shortly after I got down to North Africa in January 1943, I was asked to go out to a British RAF squadron which was about 100 miles away, near Constantine, because an acute epidemic of jaundice had occurred. I found that it was only in the flying personnel, and only in this one squadron and it had not spread to any other squadrons on the airfield.

I made the necessary examinations and what I believed to be the necessary recommendations. I decided that this was an isolated incident and that I need not pay too much attention to it because jaundice is a common thing during wars and while it causes loss of time, everybody gets well (according to the authorities) and so there is nothing much to worry about, and in that optimistic frame of mind I went through the summer of 1943 never realizing what was in the offing.

Beginning in August 1943, while going around in our hospitals, I noticed an increasing number

*Presented before the 81st annual meeting of the West Virginia State Medical Association, at Huntington, May 11, 1948.

of jaundice patients. At first it was thought that possibly the atabrine which these boys were taking prophylactically might be the cause of it but it became quickly evident that such an idea was unfounded and that the chiefs of services and I were witnessing something we had never seen before. Hundreds of jaundice cases were arising in our troops and coming into the hospitals throughout the whole of the North African and Sicilian area. Most of us had the idea that catarrhal jaundice was a mild disease and as soon as the jaundice disappeared we let them go back to their duties. But we found that while some of them recovered fully many came back with relapses and recrudescences of this disease which we were witnessing in epidemic form for the first time.

This first slide will give you an idea of the epidemic curve of infectious hepatitis in the North African and Mediterranean Theaters in 1943, 1944 and 1945. As you will note, the epidemic built up in August, reached its peak the last of November or first of December and had a rate in the theater at the peak of 100 per thousand per annum. If that rate had continued, out of every thousand men we would have had a hundred cases of jaundice that year.

It fell off sharply in January, then maintained a higher level during the summer of 1944 and then in the fall of 1944 we had another epidemic outbreak of the disease.

The second slide shows how the various components of our American forces in North Africa and Italy were affected. Now, you see that in the fall of 1943 the Air Force was hit most heavily and the cases were primarily in the Fifteenth Air Force, which at that time was making up and building up its bases along the southeast coast of Italy.

The next highest incidence of the disease that fall was in Peninsular Base Section, which means from Naples, south. It started in October. That was when we went into Naples. We immediately had a high incidence of jaundice in that base while the Mediterranean Base Section, which was established in November 1942, had hardly any rise in incidence. The Fifth Army was badly hit.

Now, as we look at the epidemic curve for the next year we will see an interesting difference. In 1944 the Air Force had practically no jaundice and the bulk of the disease was in Fifth Army troops. There was a little rise in Peninsular Base Section. There was no rise in the Mediterranean Base Section. Thus, the majority of the cases of jaundice came from the Fifth Army and, I might add, from the infantry regiments of the various divisions that went to make up the Fifth Army and not from the service troops or the corps troops or other Fifth Army components.

This is a rather interesting slide. It shows what happened in 1944 and 1945 in two divisions. One is the Eighty-Fifth Division, which came into action in our theater in 1944, while the other is the Thirty-Fourth Division which entered North Africa on D-Day in November 1942 and which had been severely affected by jaundice the year before. As you will note, there was much more hepatitis in the Eighty-Fifth Division. This shows the difference between relatively seasoned troops and new troops which are not immune when they come into a Theater of Operation in which jaundice is an epidemic possibility.

As we look back now, we know, as far back as we can go historically, that when new masses of people are introduced into the Mediterranean littoral, come late summer, fall or early winter, epidemic jaundice almost always breaks out.

When this disease became epidemic in the fall of 1943, we began immediately to worry about what caused it and we tried to run down all the various theories as to its production. Out in the Middle East in Cairo was a very intelligent, very amusing and very original young Scottish bacteriologist named Van Royn. He had made some very careful clinical epidemiologic studies of hepatitis in British officers and British enlisted men and he had come to the conclusion that the infectious agent must be a virus and that it had to be in either the stool or the urine of those infected because, he said, this disease was intimately connected with bad sanitary practices.

He put it up to the British authorities to let him test this theory by selecting volunteers and giving them either filtered stool or urine but they refused to let him do it. However, Dr. John Paul of New Haven was there at that time studying sandfly fever in our troops and, while in Siciliy, he saw this outbreak of hepatitis and. unfortunately or fortunately, as you may look at it, he developed hepatitis himself. As has everyone who has ever had hepatitis, he developed a new interest in the disease.

Doctor Paul had heard Van Royn talk and so he decided to take infectious material home from some of the Sicilian cases which he had seen. When he got back to New Haven he had a setup whereby a number of conscientious objectors volunteered to act as experimental subjects and, in short, he found that stool filtrates produced the disease while urine filtrates or straight urine did not.

It is definite now that the infectious agent of infectious hepatitis is in the stools of people who have it for a certain period of time.

Going back a little bit, there was another angle on this to lead one to believe that the infectious agent might be a virus and that angle was the outbreak of hepatitis which was not epidemic infectious hepatitis but one similar to it which occurred in our troops early in 1942 following the mass vaccination of the troops with yellow fever vaccine.

The vaccine at that time was made by suspending the altered yellow fever virus in small amounts of pooled human serum. It turned out that there were good lots and bad lots of vaccine and in persons who received vaccine from a bad lot, many instances of hepatitis developed while if the lot was "good" there were none.

This had nothing to do with the yellow fever virus per se and I want to make that perfectly clear. The bad lots of vaccine resulted from the unknowing introduction of the serum of an individual who had previously had jaundice into a serum pool. This factor was covered up for a while due to wartime secrecy but there were many cases of jaundice in the spring of 1942 and it was pretty well worked out that this homologous serum virus could be transferred by intracutaneous or subcutaneous injection of infected serum.

If you transfer this disease by these routes you will never find the virus in the stool and there will be no secondary cases. As far as is known, persons who have homologous serum jaundice are not infectious to anyone around them. Otherwise the two diseases are very similar.

Of course, the incubation period in the homologous serum type varies from 60 to 180 days while in infectious hepatitis when you use stool filtrates the incubation period is from 17 to 31 days but as far as the clinical disease which results, I don't know any way to tell the difference between them.

At the present time the only possible source of homologous serum jaundice, as you might see it, is in transfusion from a donor who has homologous serum jaundice virus in his blood or in the use of dried plasma. At the present time, the dried plasma which is generally available can be counted upon to produce homologous serum jaundice in about 5 per cent of recipients. That is because certain lots of plasma (we don't know which ones until we have tried them) have in them the infectious agent of homologous serum jaundice. That is why I myself wouldn't want to take any dried plasma unless it was considered to be life-saving and if I were going to receive a transfusion from anyone I certainly would want to go over his history to make sure that he hadn't anything that resembled infectious hepatitis.

This is a slide which portrays a characteristic clinical course of jaundice as we saw it in the epidemic in North Africa and Italy and I might add in this epidemic we had about 37,000 cases and as an average period of hospitalization was sixty days. We had a very good opportunity to observe these patients.

The prodomal period which lasted one to three days was characterized by malaise and fever. Generally, when these patients came in we looked at them and thought they had nasopharyngitis or diarrhea and we said, "All right, go back to your unit," and in two days they would be back with jaundice.

Sometimes one would have fever and then one would have a period of quiescence and then the jaundice appeared and fever reappeared. The jaundice would continue for about three weeks and then disappear. At times, in a certain number of cases, even though they were properly treated, a recrudescence of the jaundice and an increase in the size of the liver would be noted. This type of recrudescence would occur between the third and fifth week. There was one thing we learned: If a patient's icterus went above 100 it generally meant that he wouldn't get well in ninety to 100 or 120 days (which was the length of time we could treat him in the treater) and that it was better to send him home right away because he was going to be in the hospital for a long time. If the icterus index is over 100 the chances are that the patient is severely ill and the relapses are relatively frequent.

Here is what happens to the leukocytes. You get a mild leukopenia with a relative increase in lymphocytes. You will see those forms of abnormal lymphocytes which are common to malaria, sandfly fever and primary pneumonia. They look something like those lymphocytes you see in mononucleosis and, as a matter of fact, there must be a very close relationship between the viruses of infectious hepatitis of infectious mononucleosis because sometimes when patients ill with infectious mononucleosis are slightly jaundiced, one is hard put to say whether the disease is infectious hepatitis or infectious mononucleosis.

The sedimentation rate is not elevated originally but may go up about the third week of the disease. One thing clinically I have found always very valuable and that is that if early in the

disease before jaundice appears, you turn the patient's head sharply to the side, you may get a node popping out from under the sternocleidomastoid muscle. It is a sentinel node and is quite common. About two-thirds of the patients will show it and it comes very early in the disease.

You may ask about the prognosis in this disease?

Here is what happened in relation to fatality rates in our theater. In the first year of an epidemic the case fatality rate is relatively low but it goes up as the group remains in the epidemic area so that by the end of the third year you see that one out of 300 patients dies of this disease.

These represent patients who died in relapses and patients who died from the acute disease. As a rule, whether they died of the acute disease or died in a relapse when they started to do badly, they deteriorated rapidly and died within three to five days.

Out of over 36,000 cases, 92 per cent were sent to full duty. Four per cent were not completely well on discharge and had to be sent to limited duty where they could take it fairly easy. They weren't fit for the rugged life of an infantryman. Three and one-third per cent never got well and had to be sent home to the United States.

What about treatment? I think that treatment is a very important factor in this disease. The disease is easy to define. You know when patients have it, but what are you going to do about it? Unfortunately, in civil life, the treatment of this disease is extremely difficult because of the personal and economic aspects of the best method of treatment.

If I were giving a patient who had hepatitis honest advice, I would tell that patient to get into bed and get over on his back and stay there and not even get out of that bed to go to the bathroom until his jaundice had disappeared, until his liver had gone back up under his ribs and his bromsulfalein test showed less than 8 per cent retention. Then I would let him get up gradually.

It is almost impossible to get patients to follow this regimen. What, then, is the practical thing to do? Let them go to the bathroom but keep them in bed (not downstairs in the chair or lying on the couch or out on the porch) until all jaundice is gone and until you can't feel the liver at the end of the day. When the jaundice is gone and you can't feel the liver and there is no tenderness in the right upper quadrant gradually get them out of bed and day by day give them graduated exercises which are compatible with their strength.

The other important thing is food. It is my belief that no patient with hepatitis should get well from it without weighing more than he weighed when he was taken ill. If you base your diet on lean beef and casein (steaks and cottage cheese), the patient will do well, as a rule. Two hundred grams of protein should be given in this form daily. Give these patients plenty of carbohydrates. Give them a lot of fresh vegetables but try to keep them away from fats, not because fats hurt them, for if you can get absolutely nonrancid fats you can give it to your patient and it won't upset his stomach but it is almost impossible not to get rancid fat. In all of the butter and all of the meat which you buy, the fat is slightly rancid and that is unpleasant to these patients. You should urge them to eat. You should keep on feeding them and if you can get liver, feed them large amounts of it.

What about giving intravenous materials? If your patient is vomiting and cannot take anything by mouth, I think that one of the intravenous protein hydrolysates is indicated and you should give it day after day until the vomiting stops.

I don't see any great need at the present time for giving intravenous amino acids per se and the evidence is not clear just what effect choline and methionine and certain other of the amino acids will have when given by mouth in large doses. The important thing is rest and a high protein, high caloric diet.

It is a rigorous and expensive treatment which I have outlined: rest, costly diet (because meat is expensive), casein, then a period of graduated exercises, but it is the best system because you get few relapses and recurrences.

We are now finding in veterans hospitals, individuals who have had relapses and recurrences who now are developing classical cirrhosis of the liver, so we do know that the cirrhosis of the liver can stem directly from an attack of acute infectious hepatitis.

Now in closing I want to talk about another form of hepatitis. Have any of you ever had a dog who has had jaundice? Well, I have a beautiful brindle boxer nine months old named "Mike" who went through a course in the last two months, so typical of the human disease that I got interested in hepatitis in dogs and I find that dog hepatitis is a very common disease which has always up to the present time been considered a fatal disease.

It apparently is caused by a virus. I don't know whether the virus is in the stools but I am in the process of getting experiments set up to find out.

My dog lost twenty-five pounds in the course of his disease. He stopped eating like dogs will and he started vomiting like humans will and he was jaundiced. He looked just like I did when I had the disease 17 years ago, only a little worse. He was given protein hydrolysate (1000 cc.) intravenously every day for two weeks and he recovered. In talking with the veterinary physicians, I find that it is rare that recoveries take place. So I am giving you a tip, if your dog gets jaundice, be sure that he gets a lot of intravenous protein solution. When he got home "Mike" was just a bag of bones. We fed him two pounds of liver and two pounds of spleen a day and he has now come back to life.

FLOSSY MEDICAL TERMINOLOGY

My knowledge is profound, and my diction, too;
And I never use a word where ten will do . . .
—Fairly old song.

Medical writing is apt to be dull and obscure enough of itself, without being made more so by the use of unnecessarily elaborate terms or, worse still, of terms which merely have an elaborate look about them.

"Male," for example, has a lovely scientific looking air; but why use it, when with only three-fourths as many letters, you can say "adult human male"—that is, "man"? Similarly, why allude to a patient as a "female," when the world "girl" and "woman" are shorter, more generally familiar, and more exact?

"Extremities" is probably better than the old-fashioned "limbs"; and "lower extremities" can be defended on the ground that it means "thighs and legs"; but it is hard to see why "upper extremities" should ever be used, as it often is, in place of "arms."

There are places where such mouthfuls as "dermatologic" and "cardiac" and "thoracic" should be employed; but often their shorter counterparts—"skin," "heart," and "chest"—can be used to good advantage. Colloquial forms of speech are almost always brief, forceful, and generally intelligible; and it is generally better to use them if they are as exact as their technical counterparts—and always better, of course, if they are more exact.—Hawaii Medical Journal.

AMERICAN MEDICAL SCHOOLS

Until the chaotic state of medical education in the United States was revealed in a report prepared by Mr. Abraham Flexner about forty years ago, many medical schools were notoriously inefficient. As a result of this report, about half the medical schools were disapproved and standards were set up under the auspices of the American Medical Association and the Association of American Medical Colleges. The result is that the United States now possesses some of the best-designed and best-equipped medical schools in the world.—Raymond Whitehead, D. Sc., M. D., in British Medical Journal.

MODERN TRENDS IN THE SURGICAL TREATMENT OF CANCER OF THE LOWER GASTRO-INTESTINAL TRACT*

By FRED W. RANKIN, M. D.,
Lexington, Kentucky

In order that I may stick to my subject and not wander all over the field of gastro-intestinal surgery, I think I should say initially that there are three very distinct trends which have taken place in surgery of the lower gastro-intestinal tract during the last ten years. They are trends which have crystallized and which were begun and recognized by pioneers in this field twenty-odd years ago. They are (1) a prolongation of the preliminary preparatory treatment which is so necessary for rehabilitation and decompression of the lower segment of the gastrointestinal tract, (2) a more liberal use of whole blood, diets and chemotherapy in raising the patient's physiologic equilibrium to its maximum and (3) a definite trend toward the use of a single stage operation in both the colon and the rectum, not to the elimination of all graded operations, however, for there still is a distinct field for multiple procedures in many badly dehydrated and debilitated individuals. I might add a fourth and that is in the field of carcinoma of the rectum—an unfortunate trend in the hands of some of my colleagues—a trend toward the utilization of the so-called "pull through" operation or sphincter-saving operation, which has been rediscovered after having been abandoned in Hogenegg's time back in the nineties, in Germany, and later tried by all the leading surgeons of this country.

Any discussion of carcinoma (the major surgical lesion of the lower gastrointestinal tract, some seventy odd per cent of the surgeons' efforts being directed against carcinoma) should be predicated by a short discussion on the symptomatology and diagnosis of lesions of this variety.

I think we can understand the implications of that statement when we recognize that the colon is not all of a piece but is, in reality, a dual-functioning organ developed from two parts of the primitive gut, the rectum and the descending colon, around to the middle of the transverse segment, being developed from the hind gut, the rest of the colon with the small bowel, around to the papilla of Vater, being developed with the midgut and each of them having functions which are materially different, each of them harboring types of lesions which are different and each of them requiring different types of technical procedures for the eradication of organic lesions.

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The right colon is an absorbing portion of the bowel. The left colon is a store house. You can starve people to death by trying to feed them by the bowel (as we learned many years ago) if the bowel is obstructed anywhere beyond or close to the hepatic flexure.

Actually, the symptomatology and pathology differ materially because of the functional elements involved. I would like to say one word here about the etiology of cancer, which is, of course, bound to be theoretical; but it is my conviction that probably a vast majority of the cancers of the colon and the rectum do develop upon polyps which, as you know, are most frequently found in the colon and which, I think, have been proven in a number of instances, not only by workers in this country but by people in Germany, Austria and England, well back toward the turn of the century, to change from benignancy to malignancy.

It was in 1931 that Fitzgibbon and I reported a series of thirteen cases of polyps which we thought we showed microscopically to have changed from benign polyps to malignant ones.

We divided the polyps pathologically into three groups: group 1, which contains all the normal elements of colonic mucosa with no changes, which is a pedunculate polyp, varying from a few millimeters to a few centimeters in diameter and never undergoing malignant degeneration.

Group 2, which are not always pedunculates. They are smaller. They do have characteristic changes, both in the cellular and connective tissue elements, which show a progression into a malignant degeneration.

A better example, one with which you are all familiar, I am sure, is familial polyposis which is a not uncommon lesion and which is recognized by all pathologists and surgeons as a lesion which, unless radically extirpated or removed, will ultimately result in carcinoma.

I think it is safe to say that these familial polyposis cases all become carcinomatous if the patient lives long enough. I have just reported a series of ten cases which I operated upon from 1934 to 1941 in which I had three families with 19 cases of polyposis. There is little argument that this type of lesion undergoes malignant degeneration.

To return to the symptomatology of carcinoma of the right colon, as you know, physiologic disturbances characterize its presence. We might divide them into three groups: the dyspeptic group, the anemic group, and the accidentally discovered group.

Chronic ailments of the upper right quadrant are subject to exploration by the surgeon under the diagnosis of gallbladder disease, peptic ulcer, or chronic appendicitis. I think that the surgeons recently have appreciated more and more the necessity of an accurate diagnosis of dyspeptic symptoms of the right upper quadrant which eliminates malignancies of the right colon because the mortality figures in colons which are operated upon without preliminary preparation and those which are operated upon under a proper diagnosis are very convincing and materially different.

Therefore, I urge that if an unexplained dyspepsia of not too long duration with negative gallbladder, stomach and duodenum x-ray examinations presents itself, one investigates the right colon as a possible source of dyspepsia. Not infrequently an organic lesion will be found there.

The second is the anemic group and that accounts for about 30 per cent of the total. The anemia is of a characteristic type, easily recognized by a hematologist as being secondary anemia but most frequently confounded by the profession with primary anemia and treated with liver, folic acid, blood and all of the other things necessary to elevate the blood count.

It is always wise, in case the patient is a male, to eliminate the right colon before you eliminate the stomach as a source of secondary anemia. If the patient is a woman and you can eliminate fibroids and uterine bleeding, I should also eliminate the right colon by roentgenologic examination, because definitely secondary anemia from right colon cancer is much more frequently encountered than it is from carcinoma of the stomach, although all our lives we have had it handed down to us that carcinoma of the stomach is the usual cause.

The third group is the accidentally discovered group, the group most usually found in women who have recently attended a meeting of the American Cancer Society or who have heard the cancer mobile man give some talks on lumps here, there and elsewhere and who have discovered in their abdomen a small lump which is out of the pelvis.

That is a favorable group because, first, carcinoma accidentally discovered usually is not of too long duration and, second, carcinoma of the right colon because of the distribution of the lymphatic supply metastasizes slowly, usually is of lower grade and definitely has a better prognosis.

On the left side of the colon we have obstructive symptoms almost entirely and I believe that

practically all carcinomas of the left colon show some form of obstruction, chronic, acute or subacute, at some time in their existence. If the surgeon will look even after complete and careful preliminary decompression, he will find evidences of obstruction which has been relieved largely by the decompressive measures.

The reason for obstruction in the left colon and not in the right is that the bowel is very much more muscular and narrower in diameter because of the necessity of its expulsive function. Secondly, the growths which are almost uniformly in the sigmoid and higher up are of a type that tend to encircle the circumference of the bowel and, third, the content of the bowel itself is formed, whereas on the right side it is usually liquid. They are definitely not encircling in a vast majority of instances in the right colon.

Rarely have I seen an obstruction from a right colonic cancer save only in the cases in which it has encroached on the ileocecal valve.

The accurate diagnosis of carcinoma of the colon, unlike that of carcinoma of the rectum, rests with the roentgenologist and if he is given a fair chance and is an expert roentgenologist—and I mean an expert roentgenologist and not just the possessor of an x-ray machine—he will give you a diagnosis and a localization which will permit preliminary preparation and a planned operation.

The first mistake usually is made by the man who sends the case in to the x-ray man and demands a hurried diagnosis which, of necessity, must be made on an unprepared bowel.

I see quite a number of intestinal obstructions that are caused by the x-ray. If the bowel is adequately cleansed with mild purgation and enemas, and if the x-ray man can use a barium enema, and if he is given a fair chance, he will give you an accurate diagnosis.

In one of my cases the patient had a carcinoma in his colon just proximal to the hepatic flexure, an unusual position for obstruction to take place but that is where it was.

He was examined by a roentgenologist who made the correct diagnosis by means of a barium enema. Then, not being satisfied with what he had accomplished, the roentgenologist gave the patient a cup of barium to drink. When it met the barium column below the patient had an acute obstruction. It didn't simplify the problem of the surgeon much but the patient survived not only the roentgenologist but surgery.

I should like to repeat that ingested opaque media for the diagnosis of colonic lesions is not only worthless in so far as localization is concerned but is absolutely dangerous if there is any obstruction present.

Now this illustrates the second trend. We have a given diagnosis and the diagnosis, may I say, should not begin with a barium enema. It should begin with a rectal examination, proceed with a proctoscopic examination, and should conclude with a barium enema. Once you have established an accurate diagnosis, a period of preliminary preparation has lowered the mortality and the morbidity of colon and rectal surgery and has permitted its standardization in a large measure.

The preliminary steps are, first, efforts at cleansing the bowel and getting rid of its contents. That, I think, very frequently should be at least seven days, certainly five days and usually when it has been pursued vigorously the bowel is clean.

Then comes the replacement of blood loss and the establishment and maintenance of protein balance by transfusions of whole blood. During the war we became so enthusiastic about plasma that we lost sight of the advantages of whole blood over plasma for a great many things.

I do not mean to say that plasma doesn't have some very good indications at present and will continue to have more but for the replacement of blood and for the replacement of proteins and the maintenance of proper chemical balance, whole blood itself, utilized lavishly, is a sound program and has been of great assistance to us in the preliminary preparation of these cases.

At the same time glucose and saline are used to combat dehydration and of course one couldn't in this day and time overlook vitamins. We are bound to give vitamins of some kind or other so I hope that C and K are the proper ones. We do give vitamins just to be in the parade but there are other things that I am sure are more necessary and advantageous.

Now we come to a moot question which I think probably is being settled against my judgment and that of my colleague, Dr. Thomas Jones, of the Cleveland Clinic. Until after the war neither of us had ever used chemotherapeutic agents in the preliminary preparation of patients for colon and rectal surgery.

In Atlantic City, a year ago, at a symposium on colon and rectal surgery, our mortality was shown not to vary one whit from the mortality of the individuals who had gone overboard on chemotherapeutic agents. I am sure, however, that we have been to hard-headed and arbitrary about it.

I am sure now that they have crystallized their thought on a substance, a sulfa drug which is not toxic, which is bacteriostatic and which can be used rather freely, that definitely there must be some advantage to the use of these agents, likewise to the use of penicillin and streptomycin. I use penicillin postoperatively. I have had no experience with streptomycin but I do use sulfathalidine routinely, three or four days prior to operation.

I say I probably have been too arbitrary about it but I think it should be emphasized that none of these chemotherapeutic agents nor any pills or powders are substitutes for mature judgment and for expert technical application of proper basic principles in intestinal surgery. I think there has been entirely too much leaning on artificial crutches of this kind rather than pursuing perfectly obvious sound principles of rehabilitation and decompression in the old-fashioned way.

Now when you have opened the abdomen and explored the liver and decided to do a resection, you have at your fingertips a number of types of procedure. As I say, we have come more and more to one stage operations in the colon. In 1933 I began to do one stage operations on the rectum. I have long done one stage operations on the right colon but only recently have I begun to do many primary anastomoses in the left colon.

As I circularized a number of surgeons who have talked at great length about how many one stage operations they were doing in the left colon, I was astounded to find that what they were talking about was about 15 to 20 per cent primary resections as against graded operations for the balance of the group and I think that is about right.

If a patient for any reason is not deemed a worthy risk for a one stage operation, ileocolostomy, then a subsequent resection, of course, may be indicated. As to the type of resection it must be, I have no very fixed ideas. I think it is perfectly all right to do an open or closed anastomosis.

I should say that with a properly prepared patient the chances are about even that both of them will turn out satisfactorily and I think the surgeon should do the type of technical procedure he is most familiar with. Having followed closed anastomosis and having invented an instrument by which it is done, I still stick to it in the majority of cases but I have no great belief that it is a great advance and I think that the open anastomosis is a perfectly good and reasonable operation to do.

In the left half of the colon, I don't think that one will find most surgeons doing the majority of their cases with primary anastomosis. In the first place, you are not sure enough of the blood supply and in the second place, you have had obstruction and you do have a little infection.

Rarely, however, I must admit, does a leakage take place. I still like to do obstructive resections in a great many cases and I am very well satisfied with this procedure. It isn't nearly so nice from the standpoint of morbidity as the primary anastomosis, a matter of two weeks against two to three months. However, I think the important thing is to get the patient well by whatever means will do it most surely even if it takes more time.

The exteriorization, or the Paul-Block-Mikulicz, has gone out pretty much. Very few surgeons use it at all, I believe, except those at the Lahey Clinic and I think I am correct in quoting them as being inclined to cut the bowel off and leave a clamp on as an obstructive resection, rather than letting the cancer lie in the cut wound.

Cecostomy or colostomy work well for obstruction. There is a group of cases of 184 cancers of the left colon which were done by these various types of operation. You will notice that the top is obstructive resection and complementary cecostomy. I have long since abandoned complementary cecostomy. It isn't necessary in a properly perpared colon. If you get distention and an upset stomach, drop a Miller Abbott tube down and I think you will find it just as satisfactory and perhaps more so.

I haven't used cecostomy along with this in a good many years. In obstructive resection by itself, I had 62 cases with a 10 per cent mortality rate. Seven primary anastomoses with no mortality would look like a pretty good argument for primary anastomosis but they have to be right or you can't do it and I mean by 'right' that the criterion of accurate blood supply, visualization of the blood supply and accurate suture approximations are essential. In 184 cases, there were 133 resections with 72 per cent resectability.

In another group of cases that I reported in 1935 in the Journal of the American Medical Association, there was a 51 per cent survival rate after five years which, for the prognosis of colonic cancer treated surgically, is extremely good.

Now to the carcinomas of the rectum. Here is an easily diagnosed, easily recognized lesion which unfortunately does not come to surgery until after about ten months have elapsed since the initial symptoms were noted by the patient. I think that the patient is more to blame in this

particular case than the doctor. Occasionally the doctor is to blame because he hasn't made a rectal or proctoscopic examination. At the same time we haven't advanced very far in getting these patients to the surgeon at an earlier date despite the fact that we preach about symptomatology, blood in the stool, blood on the stool, change in bowel habit, et cetera. Constipation and diarrhea probably are the most important symptoms but the most important thing is to examine a patient who has had any bowel symptoms and not guess at it and treat him for piles because, although piles do account for a vast majority of symptoms of bright red blood and cancers always have bright red blood, we must differentiate between the two.

Now the choice of operation. Here, I put down four operations. You can take your choice of them and I think that my choice lies among the first three. One is combined abdominal perineal resection. I think that is the most satisfactory operation for carcinoma of the rectum. Let's say 'rectum' because I mean by that every cancer that is below the peritoneal fold.

There has been a lot of work done on the lymphatics of the rectum since Miles' work at the turn of the century and the consensus is that carcinoma of the rectum does not metastasize downward very often, that is, towards the anal canal. There is no question, however, that the majority of metastases take place in the lateral region and up into the mesentery or sigmoid. For that reason and because I have seen so many recurrences following these 'pull through' operations for saving the sphincter, I have never done one and I still believe that time is going to prove the wisdom of that decision.

The 'pull through' operation, the sphincter-saving operation, was first done by Hogenegg in Germany back in the nineties and the same thing happened that happens now. The vast majority of them don't have control. Maybe I shouldn't say the vast majority of them but I should say a lot of them don't have control. They have strictures.

Secondarily, a lot of them have local recurrences. I have operated on two in the last month that had local recurrences in the mucous membrane of the rectum where the operation had been done, not to count recurrences in the lateral zones. Thirdly, as far as I am aware, the prognosis statistics on those cases have not been published in any group of cases that I have been able to find.

Now we come to the rectosigmoid. I always like to call the rectosigmoid an area of bowel about an inch on one side above the peritoneum and below the peritoneum. When you get inside the peritoneum, that is, when you have a cancer intraperitoneally and close to the rectosigmoid, close to the reflection, I think that if it is within two inches of the reflection it should be treated by Miles' operation without a sphincter-saving anastomosis having been tried.

If it is two inches away I think the vast majority of metastases will be upward into the mesentery and therefore you can do as radical an operation by doing an anastomsis. There is nothing new about that. Surgeons have been doing that for a long time and I note that some of these enthusiastic sphincter-savers are doing just that and talking about resecting the top of the rectum underlying it and doing the anastomosis low down.

I was dumbfounded not long ago to see a man show a picture of an operation of this kind, claiming to resect a rectal growth, when he didn't even mobilize the rectum. He didn't break it away from the hollow of the sacrum. He had a low sigmoidal growth which obviously was a good one to do an anastomosis on and that is what he did.

There is no trick to sewing two pieces of bowel together low down in the pelvis. That is easily done by any skillful surgeon and if the growth is two inches away from the peritoneal reflection, that is a good operation to use and I think all of us have been doing that but I think a good many of these sphincter-savers are calling that a resection of a rectal growth with preservation of the sphincter by anastomosis.

The other operation. One must have more than one operation. I think one occasionally uses Mummery's operation but only once in a while. Last summer I reported a group of cases, the vast majority done by the one stage operation; 167 abdominoperineal resections, 9 deaths, and I think when you get very much lower in your mortality than that you begin picking your cases. I don't believe I will do much better than that; Mummery's operation, fifty-six cases with nine deaths.

That is not a fair mortality. You can do very much better than that with Mummery's operation so far as mortality is concerned if you do it routinely and I think it is pretty much an operation for a bad risk.

My own operation, I have abandoned. It isn't necessary any more. Here are 310 cases, 401 operations, 233 resections. Of these resections 167 were done in one stage, a resectability of 75

per cent and an applicability of the Miles operation in 71 per cent.

I still think that Miles' operation is the operation of choice for cancer of the rectum, always below the peritoneal fold. I think it is the operation of choice unless the growth is at least two inches above the peritoneal fold.

I think that the tendency to one stage procedures which we are getting into more and more is a good one, that with better selection, better preparation, better technical skill, we will reduce the mortality figures more and more. I believe that the preliminary preparation is just as important a part of the program which has accomplished this, however, as anything else that the surgeon puts into his efforts.

MEDICAL-DENTAL RELATIONS

At present, the training received in dental schools, particularly those connected with universities, is making the dentist a more rounded professional man. His knowledge of pathology and histology, and his ability to recognize various conditions associated with acute and chronic illnesses, must warrant more consideration.

Due to an increased number of internships in hospitals and institutions of various kinds, the dentist has an opportunity to further his knowledge and broaden his scope. It would be a step forward in medical-dental relationships if there were a free exchange of ideas between physician and dentist in individual cases: For example, the pediatrician should consult with the orthodontist; the oral surgeon with the otolaryngologist and ophthalmologist; and the practicing dentist with the internist. A case history—short and concise—would help to overcome the fear on the part of either doctor or dentist that he is working in the dark.

The matter of referring patients, one to the other, should have the courtesy of acknowledgment, so that either physician or dentist knows what has been done, and how the patient is progressing. If a little more attention to diplomacy and professional courtesy were shown on the part of physicians, it would make the handling of patients much simpler and place the dentist in the light of an equal with the physician—and not simply classify him as a technician.—New York Medicine.

SELECTED SEED

A great deal more than intelligence goes to the making of a good doctor; and the student who by average standards is insufficiently intelligent may, if stable and determined, not only succeed in qualifying but become a better doctor than his brighter unstable friend. In the final analysis, therefore, examination results and intelligence tests do not fully prove a condidate's suitability or unsuitability, which can be judged only with knowledge of his character, temperament, and personality.—The Lancet.

THE MANAGEMENT OF THE MENOPAUSE WITH PSYCHOSOMATIC ASPECTS*

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I don't think that I have to apologize for my subject, although I didn't pick it myself. It has been my observation that audiences made up largely of general practitioners are more interested in a discussion of a comparatively simple every-day problem like that of the menopause than they are in the presentation of a more technical subject.

You all see many women going through the menopause. I don't have to tell you that the lay concept of the menopause stems largely from a combination of superstition, folklore, and half-knowledge. You know as well as I do of the wrong ideas that many women have about the menopause. The fact that it is called by the laity the "change of life" makes one think that the popular concept involves the idea that there is some very profound fundamental change which takes place in the lives of women at that time.

You know that many women have much apprehensiveness about the menopause because they fear that they may lose their minds. No woman loses her mind from the menopause alone. There are a good many women who do develop psychoses in middle life. So do a good many men. But the actual psychoses are not due to the menopause per se but to certain involutional changes that take place in middle life.

There are many women who link the menopause with the idea of cancer. The menopause does not cause cancer. Many women do get cancer in middle life but they also get it at other ages and the menopause has nothing to do with the starting of a cancerous process.

Again, many women have the wrong idea as to the relation of the menopause to sex life, believing that it means the end of their physical attractiveness to their husbands and the end of sex feeling. That, of course, is not true. In the human being the ovary has very little to do with libido, the sex sense. In the lower animals it is indispensable. An animal no longer goes into heat if the ovaries are removed but in the human female the seat of libido is in the psyche, with certain auxiliary erogenous zones such as the vagina, the clitoris and the mammary gland. The ovaries in themselves are not essential at all to sex gratification.

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As a matter of fact, many women have far more sex feeling after the menopause than they had before. Many factors can contribute. During menstrual life many women have before them constantly the fear of pregnancy, such fear acting as an inhibiting influence. Once they are beyond the risk of pregnancy this inhibition is removed and then, for the first time, joy is unconfined, so to speak.

A good many women also have the idea that they are going to get fat at the time of menopause. Most women around the menopausal epoch have a tendency to put on weight, usually moderately, five, ten or perhaps fifteen pounds. Most often they are concerned about the middle-age deposit of fat around the abdomen. Only a comparatively small percentage of women get quite heavy, although this can almost always be controlled by dietetic and other measures.

As a matter of fact, this ontake of a moderate amount of weight comes as a blessing to some women. Some skinny, scrawny, old maid types of women, when they reach the menopause, put on just enough weight to give them matronly curves. They are physically much more attractive and they develop a sense of well-being, a sort of second flowering of womanhood.

These are some of the deep-rooted fears in women and we have pretty much the same situation that the psychiatrists have in the cases of so many normal individuals who have queer little mental quirks, funny little ideas in the back of their heads, phobias. A large percentage of perfectly sane people have lurking in their subconscious minds phobias of some sort, not quite so fixed, of course, as they are in the organic psychoses, not like the fixed delusions, but sometimes almost as difficult to dislodge.

Speaking about the fixed ideas of actually insane individuals, I was at a meeting in North Carolina a short time ago and one of the psychiatrists there on the same program with me was telling about the insane patient with the fixed idea that he was going through life as a corpse and of course nothing could shake him of that idea. The psychiatrist had him in the office one day and he said, "Mr. Smith, you are quite sure that you are a corpse?" "Oh, yes, Doctor, sure." "Mr. Smith, do you think that a corpse can bleed?" "Of course not, Doctor, of course not." The doctor jabbed the patient with a sharp knife which he had ready and the blood began to flow. "Now, Mr. Smith, what do you think?" "Doctor, I was absolutely wrong. A corpse can bleed."

The little fears, the wrong ideas that women have in their minds at the time of the menopause are not so deeply fixed as this and a large part of the management of the menopause consists in ventilating the woman's mind by opening up its windows, giving her correct information, telling her what the menopause is and especially what it is not.

No sensible doctor treats any disease *per se*. He treats a patient who happens to have that disease. We can't cure the menopause. It is just as inevitable as death. Every woman, if she lives long enough, must go through that normal transition period in her journey from the cradle to the grave.

We can't cure the menopause but we can by simple explanations do a little to make the lot of the woman easier. A doctor can treat women much more honestly and much more effectively by talking to them at this time than he can by shooting hypodermics into them.

To all of this sort of thing we apply the fancy name of psychosomatic medicine. It is the same kind of medicine that every common-sense doctor has always practiced. If you take the time to explain to women in simple language just what the menopause is, in the vast majority of cases they will need nothing like estrogen therapy to tide them through this phase.

Just what is the menopause? What happens at the time of the menopause? At the time of the menopause the ovary ceases functioning. The ovary does have a sort of predestined life span, just like the Biblical three score and ten for human life.

The ovary functionally lives for a period of thirty-two or thirty-three years and when it dies it stays dead. No one ever has been able to reactivate or rejuvenate the ovary once it has reached the end of its functional life at the menopause.

It is different with the uterus. The uterus can be rejuvenated. It is possible by certain hormonal means to convert the small, atrophic uterus of a senile woman one hundred years old into one the size of the big, husky organ of a woman of twenty-five years. If you give estrogen to a woman having a small, nubbin-like senile uterus, you can convert the uterus back into an organ of reproductive size and if you give her estrogen followed by enough corpus luteum hormone you can produce a perfect reproduction of a menstrual cycle.

That has been done many times and it is done sometimes by certain tumors which I will not stop to discuss but which sometimes appear in women long after the menopause. They reproduce the

sex hormone and they rejuvenate the uterus of such a woman as previously described.

Until the time of the menopause, that is, while the ovary is carrying on its function, endocrine equilibrium is fairly stable. It is very much as if a group of people were standing on a finely-poised platform. One of them steps off and equilibrium is disturbed, producing a swaying of that platform until equilibrium is readjusted.

The ovary steps off of the platform, so to speak, at the time of the menopause. Equilibrium is disturbed for a while. This period of instability is what we speak of as the menopause. Incidentally, the term 'menopause' is not quite as adequate, to my mind, as the term 'climacterium'. The latter is derived from the Greek word *klimakteros* which means the rung of a ladder, indicating that inevitable step which every woman must take in her journey through life. With the ovary dropping out of the picture, we have a certain changed endocrine pattern produced.

The characteristic endocrine change observed at the time of the menopause is an absence of the estrogenic or ovarian hormone and the presence of a relatively large amount of the pituitary gonadotropic substance.

The pituitary and the ovary are finely balanced during productive life, in a sort of shuttlecock or see-saw relationship. When the ovarian function is low, pituitary is always high. When the pituitary function is high, ovarian function is depressed.

After the menopause, there is an absence of estrogenic hormone and the presence of a large amount of the pituitary gonadotropic hormone because the pituitary keeps on functioning long beyond the menopause. If this be true, if there is this lack of estrogen, the administration of estrogen should be rational, and it is rational for the treatment of symptoms if they become sufficiently severe. I will emphasize that again in a minute.

No gynecologist now disputes the value of estrogen therapy when it is indicated. Most of my talk will be devoted to a discussion of the limitations, the contra-indications and the possible hazards of this form of treatment.

Thirty or thirty-five years ago, gynecologists were divided as to whether or not ovarian therapy was of any value for the menopausal symptoms. Some believed that ovarian tablets, as we formerly used them, corpus luteum tablets, or ovarian residue tablets, were of no value. Any apparently good effect was due to the psychogenic factor.

Looking back at this now, we know that the skeptics were right because we know that the old ovarian tablets were inert. But now we have ovarian substances which are undeniably potent. Ovarian hormones are no longer anything mysterious or elusive.

We used to talk about the ovarian secretion but nobody knew what it was. It was an elusive, mysterious thing but now we have the ovarian hormones in pure form. We know their exact chemical composition, their exact molecular structure. We can prepare them in crystalline form, we can handle them, we know a lot about their pharmacologic effect, much more than we do about many drugs used for hundreds of years. So when we use ovarian hormones today, we are dealing with very tangible substances. We are dealing with a form of drug therapy and we can even prepare these hormones synthetically.

At the time of the menopause, with the withdrawal of ovarian function, there may be a sort of symptomatic repercussion, usually mild. The symptoms of the menopause are not just nervousness, irritability and general cussedness or anything of that sort on the part of the woman. The characteristic hormone withdrawal symptoms are of vasomotor nature—hot flashes, sweats, sometimes drenching sweats, and the far less frequent so-called flashes, the hot tingling sensations that involve the whole of the body.

In the majority of these cases the symptoms are mild. A woman will have only a few flushes during the day and in a case of that sort, she should have no estrogen therapy at all. She doesn't need it and it harms her, I think, to have estrogen therapy for such mild symptoms.

If a doctor encounters a patient at the age of forty who comes to him because she is nervous and irritable and fussy, can't sleep, and has bad digestion, if he is a bad doctor, a poor doctor, he will say to the woman, "Oh, the change of life is beginning to work on you." She is probably still menstruating perfectly normally and yet he will reach for the old hypodermic. He is doing that woman a lot of harm.

That woman's symptoms are not menopausal. She has no hormone withdrawal symptoms. She has no flushes, no sweats or anything of the sort. Her symptoms are due to domestic cares, the care and responsibility of rearing a large family of children, financial, economic or marital difficulties. And those symptoms represent functional disturbances and anxieties, neuroses and so forth, that such women so frequently develop. The menopause has nothing to do with them. The

menopause, as a matter of fact, may not occur for ten or fifteen years.

Women don't develop true menopausal, true vasomotor symptoms ordinarily while they are still menstruating normally. It is when they begin to skip periods or cease menstruating completely that these symptoms, if they appear at all, are apt to become troublesome. As long as menstruation is proceeding, we can assume that the ovaries are producing all the estrogen the woman needs. Thus, it only does harm to make her an estrogen addict.

I would like to emphasize the undesirability of using hypodermic estrogen for menopausal women, although I am sure you will agree that it is a widespread habit. I don't believe I have given a menopausal woman hypodermic estrogen for years. It is unnecessary and it is undesirable.

We have an abundance of good oral estrogen preparations available. I think that the discovery of the estrogen potency of nonhormonal substances such as stilbestrol has been a real godsend to women because it emphasizes the possibility of relieving symptoms by the purely oral route. It has been a remarkable advance. We have always known that even the natural estrogens are potent when given by mouth but it takes many times the hypodermic dose of the natural hormone to produce the same effect orally.

Eight or nine years ago some British investigators, Dodds and Kennedy and their group, were working on the problem of carcinogenesis—producing cancer in animals by certain simple chemical substances (the hydrocarbons). In the course of the investigation these workers found that some of the substances which were carcinogenic were also highly estrogenic and that if, for example, they castrated an animal they could produce the phenomena of heat by administering various derivatives of this hydrocarbon group—identically the same effect that was produced by the natural hormones that we used to think an elusive part of the life principle itself. And yet, these common, every-day chemicals produced the same effect as the mysterious, vital hormones.

The most important of this nonhormonal estrogenic group was the stilbene group, and the most important representative of that group was diethylstilbestrol, which is used all over the world for its estrogenic capacity. Here we have a substance which is not a hormone at all, which, chemically, is not the least bit like the natural hormones and yet has a more powerful estrogenic effect than most of the natural hormones themselves. It has the further virtue of being almost as active when given by mouth as it is when given hypodermically. The introduction of stilbestrol rendered the service of accentuating the importance of oral over hypodermic estrogen therapy.

Stilbestrol has certain disadvantages. In about 10 or 15 per cent of women it produces unpleasant toxic effects. We should emphasize the fact that these are not dangerous toxic effects. There is no liver degeneration nor kidney degeneration but symptoms such as gastric unrest, nausea, vertigo, occasionally a mild rash and these occurring in only a small percentage of women. When and if they do occur, there are available other oral estrogens with less toxic effects. I don't have to enumerate them. You know them as well as I do: hexestrol, premarin, estinyl, dienestrol, meprane and many others. (Always in the audience there are some representatives of manufacturing houses and I mustn't forget that they are hurt if I don't happen to mention the name of their preparation.)

At any rate, there are many of these oral estrogens and in the treatment of menopausal symptoms, when treatment is necessary, they are just as effective and far more agreeable to the patient than hypodermics of the natural hormones, because hypodermic treatment is associated with the hazard of psychologic addiction to any form of needle treatment.

These women become needle addicts and they begin to feel that they can't get along without their two hypodermics a week of such and such a preparation and they keep this up for years and years. It is a form of real addiction, not quite as bad as morphine but almost as hard to break a patient of, and a doctor should not get his patient started on that sort of therapy.

As I have said, in those women who merely have vague nervous symptoms but are without these diagnostic criteria of hormone withdrawal symptoms, we should not resort to estrogen therapy. When we do use estrogen therapy we should always select the oral route. Those are the first two things I wanted to call to your attention.

The next thing is this. No woman needs estrogen therapy constantly. In her transition through the menopause I think that the doctrine preached by some, that of a so-called maintenance dose, is a wicked one. We can't cure the woman of the menopause. The transition period is associated with very few symptoms in most cases. But from 10 to 15 per cent of all menopausal women do have many flushes during the day, perhaps fifteen, twenty or twenty-five. And they may be awakened

during the night eight or ten times with shortness of breath, flushes and profuse sweats. They may also develop a whole array of secondary symptoms so that, in a certain percentage of women, we do have to treat these unpleasant symptoms.

Estrogen therapy is not meant to cure the woman of the menopause. It is meant simply to let her down gently when she strikes these symptomatic bumps and only when and if she has enough vasomotor disturbance to constitute a problem to her. Estrogen therapy should be used only in that intermittent fashion.

If you give a woman such therapy constantly you can prolong the menopause. I don't think there is any question about that because you keep up for years a constant substitutional and vicarious ovarian function and thus delay that inevitable readjustment which must take place. If a woman has mild symptoms she is better off without any estrogen therapy. Get the readjustment over with and give estrogen only in those cases and at those times when the symptoms are sufficiently severe to be a real problem to her.

As a rule, the vasomotor symptoms are intermittent. They come sometimes rather periodically and then a woman can be given some tablets of stilbestrol, half a milligram, or corresponding doses of a similar preparation but we always tell her that as soon as she feels relieved, as she is apt to do within a few days or a week, to stop taking these preparations. She doesn't need them then. She doesn't need them constantly.

The policy of maintenance therapy is, I think, a pernicious one. It is almost as pernicious as the idea of prophylactic estrogen therapy. Some years ago an article appeared in the Journal of the American Medical Association advocating the prophylactic use of estrogen in women approaching the menopause. It is a ridiculous and wrong conception of estrogen therapy to use it in women who are still getting plenty of estrogen from their own ovaries. Why start them on so-called prophylactic estrogen therapy?

The constant use of estrogen therapy is not only illogical but it can be harmful because it prolongs the menopause. It can also be harmful otherwise, by producing postmenopausal bleeding.

As I have already told you, we can build up the senile uterus by giving estrogen but when it regresses bleeding occurs. If the woman has had her menopause the year before and receives continuous estrogen therapy, she may begin to bleed and you are worried and the patient is worried.

We then have to think of the possibility of adenocarcinoma, assuming the cervix is normal. I can tell you of instance after instance of that sort of thing. In the early days of the use of estrogen therapy, I was moved to write a paper on the hazards of stilbestrol therapy for the Journal of the American Medical Association.

Nowadays when such bleeding starts the first question is, "Have you been taking any ovarian substances?" I saw one such woman who had just finished her 250th milligram tablet of stilbestrol—and I don't think she ever needed any. I don't think we usually have to curet women in such cases but simply stop the medication. The bleeding phase will soon be over and it will not then recur so that we are not exposing a patient to the hazard of possible cancer by waiting for a number of weeks.

Ordinarily in such cases we have a clear-cut history of injudicious estrogen therapy, either with stilbestrol or with any other estrogen.

This brings up the question: Can we actually produce cancer by giving too much estrogen therapy? This is a question which often worries practitioners and there is some basis for thought along that line because estrogens in certain animals can produce cancer. The estrogen trail has for many years been a hot one in the search for the cause of cancer.

Even before we had pure estrogen men were working on it. Many years ago, before we had the pure secretion, Doctor Loeb made the statement on the basis of extensive experimental work, that estrogens are important as predisposers to cancer in those organs and in those tissues which are normally under the physiologic control of estrogens—not in cancer of the stomach or cancer of the lung but in cancer of the genital canal and cancer of the breast.

Those areas are more or less controlled by estrogens and in those regions, the mammary area and the genital tract, Doctor Loeb said that estrogens may be predisposing factors to cancer. Then, when we got the hormone, further experimental work was done. Many of you are familiar with Lacassague's work in 1932. By administering estrogens to male rats of a species the females of which (but not the males) had spontaneous mammary cancer, he was able to produce at will cancer of the male mammary gland. Everybody who has ever repeated this work has confirmed it.

But we should inject this thought, that the dosages required to produce experimental cancer were unbelievably high and prolonged, far

greater than anybody would think of using therapeutically if translated to the human scale, measured by millions of units for months and months at a time. But, at any rate, it was possible to produce cancer in those animals.

Many other types of animals have been studied experimentally. It is possible to produce in a monkey cancer-like lesions in the breast which are difficult to differentiate from cancer, but not real cancer lesions, since, when the treatment is withdrawn, these lesions regress. They don't go on under their own steam as cancer does and they can be made to disappear even more quickly by giving the corpus luteum hormone.

In one species of animal, in the mouse, it has been possible many times to produce genuine cancer of the cervix by giving estrogen, so that estrogens do have this predisposing influence within certain limits.

The conception that I have always had about cancer is a simple one but it agrees with all the fancy scientific work that anybody has done. There are two things necessary to the development of cancer. One is some unknown chromosomal or genic factor which is inborn. Heredity, of course, plays a part in that predisposition to cancer.

In some women that tendency is so great that without any external irritation, without any hormonal stimulant, such women are going to get a cancer somewhere. They are the women who develop a cancer with no irritation of the cervix. It is just bound to break out somewhere.

There are others in whom this innate tendency is less highly developed and they need this innate tendency plus some external irritative factor such as chronic irritation of the cervix, an ulcer about the mouth, or some hormonal factor.

There is a third group in which that tendency is so poorly developed that they can be subjected to all kinds of irritation and yet never develop cancer. This is an oversimplification of the general concept but it is one which I think agrees with all of the scientific work that has been done. In the foregoing sense the use of estrogens is a sort of predisposing factor.

The question arises, do we have any human evidence that cancer has been produced by estrogen therapy? So far as I know, there isn't a single authenticated case of cancer that can be shown unimpeachably to be due to estrogen. Cancer of the breast can develop in women who have had estrogen therapy. But many women have had cancer of the breast before estrogen therapy was used. We can't use that kind of *post hoc ergo propter hoc* reasoning.

The same thing is true of cancer of the uterus. Until a few months ago only one case of carcinoma of the endometrium which was thought to be due to estrogen therapy had been reported, the case of Fremont-Smith and his co-workers in Boston. Unfortunately, no illustrations were published. At any rate, this patient had had estrogen therapy and cancer of the uterus developed later but, as was said of cancer of the breast, many women have had cancer of the uterus without having received estrogen therapy.

All this being true, no doctor with common sense is going to use estrogen therapy indiscriminately and he is going to keep away from it if he can in the cases of women who have some theoretic predisposition to the disease, whose families are worm-eaten with it (as when both the father and the mother have died of it). You are not going to use estrogen therapy in a case like that if you can help it. Nor should you use it indiscriminately in women who have had cancer of the uterus which has been treated by radiation and in whom menopausal symptoms then developed. You would rather use something else if you can. Personally, I don't believe that modest doses of estrogen would have any harmful effect but just the same it is better to take no risk. Testosterone is preferable in such cases because it relieves the symptoms without the hazard of estrogens.

CANCER IN CHILDREN

Cancer has become one of the leading causes of death among children. Within a short period of time, it has risen from a position of comparative insignificance to one of great prominence. Today, cancer kills far more than measles, diphtheria, poliomyelitis, or a number of other "childhood" diseases. . . .

The attitude of hopelessness and despair so often adopted in relation to childhood cancer is justified in only certain instances. True, many tumors of children, as now seen, have unfavorable prognoses; but there are several reliable reports of long periods of survival of young patients suffering from intracranial tumors, osteogenic sarcomas, retinoblastomas and various other neoplastic disorders. Particularly in the preschool child, numerous curable types of cancer are found. In this group, certainly, significant reduction in mortality rates might be expected to result from frequent and adequate physical examination, and prompt and accurate diagnosis.—Texas Cancer Bulletin.

TAKE TIME TO LISTEN

Be willing to take time to listen to a patient until he feels that he has a friend who is trying to understand his case and help him.—J. F. in Ohio St. Med. J.

The President's Page

This is my last "President's Page" in the West Virginia Medical Journal, and I can truthfully say that I am at a loss to find words adequate to express my feelings.

Last January the presidential mantle was handed to me by an able gentleman and surgeon, Dr. Wade H. St. Clair, who gave the Association one of the best and most successful years in its history. The advice he gave me may be summed up in these words: "In the trend of human life, two things observe with care—of whom you speak, to whom you speak, and how, and when, and where."

As I look upon the past year and other years in the history of medicine, I find that the rank and file have been responsible for the great strides made by our organization, and it is these men of medicine whom I wish to commend for any success we may have attained during this year.

In organized medicine, it is important that we do not employ antiquated techniques in trying to build a solid foundation for future medical security. The medical profession of West Virginia must not build in terms of the past, but in terms of the future. Only by utilization of sound methods can we hope for the success of programs now under way or that may be planned for the future in the field of medical education.

As I look at medicine today, the national picture is not a thing of beauty. Though it is true that much has been accomplished to improve human health, much more is needed. We may boast that by 1960 there will be probably one person of sixty years of age or over in every six, in contrast to 1900 when only one in every twenty managed to survive the three score mark. But, we must ask ourselves, is longevity our goal, or are we equally concerned with the health and happiness that should be ours during this brief span of life?

We have many serious problems to face in the future, and we must find a solution, as in the past, that will be constructive in nature. Medicine must continue to go forward. We must provide the very highest type of leadership available.

For our president in 1949, we have selected a man who has already proved his worth. Dr. Thomas G. Reed, of Charleston, has served well and faithfully as a member of the Council for the past four years, and has served on special committees charged with the task of providing a sound medical legislative program. He possesses all the qualities of a leader of men. In his hands, West Virginia medicine is safe during the coming year.

Finally, this is the month when we should stop and give some consideration to the anniversary of the birth of the Greatest Physician. His name has been inscribed upon all things that are great. I know of no other group of people who have done more than the members of the medical profession to carry out the great humanitarian ideas expressed by Him, and to Him all of our work is humbly dedicated.

Thomas Bee

President.

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CHRISTMAS, 1948

Christmas this year is no different than any Christmas in the past so far as observance of the feast day is concerned. It is different in that families separated on account of World War II are for the most part once more united. The Holiday Season this year should bring to them added happiness.

So long as there are wars and rumors and threats of war, it will be necessary for this great country to maintain a strong military organization, and this calls for continued participation by the medical profession. With two or three exceptions, all of the members of the State Medical Association who served in World War II are back in private practice. It is possible that those who remain in the armed forces will decide to make the Army or Navy their career.

The Publication Committee and the headquarters staff at Charleston join in wishing all of the members, no matter where located, a very Merry Christmas and a Happy New Year.

PROFESSIONAL FREEDOM

The results of the recent election are an excellent example of democracy in thought and action. However, their significance and implications, as regards the medical profession and the future of medicine in America, certainly do not have a democratic quality.

In the light of the recent Ewing report and the statement of policy by the President, we may expect another, and probably more concerted effort to inflict bureaucratic control on the care of the sick. Apparently a large segment of our population is prone to accept the promise of so much, as regards health care, for so little. Our responsibilities, as physicians, are twofold and equally important.

As long as our present physician-patient relationship is maintained, we are in a position to, and must advise our patients concerning the dire seriousness of state controlled medicine with the certain increase in direct taxation needed to provide free care, bungling and inept administration by lay personnel, and the absolute disruption of the bonds between patient and doctor as they now exist.

There are accepted ways and means for the members of the medical profession to bring to congressional attention our personal feelings and desires in this matter to say nothing of the fact that our knowledge and training make us the only segment of the population actually fitted to lay and carry out plans for health and medical care. As individuals, our activities cannot have too much impact upon Congress, but as a group, with well-organized and integrated effort we can succeed in defeating this attempt at pernicious legislation in 1949 as in previous years.

Our active financial support of such organizations as the National Physicians Committee and the American Association of Physicians and Surgeons will provide a means of continuing the fight against a governmental evil which will threaten us just as long as certain bureaucratic individuals have the lust for power.

WHAT BECOMES OF PRE-MED STUDENTS?

Since there is at present such widespread interest in medical and dental education, it is timely to review in this Journal the number of students at West Virginia University in the preprofessional biological sciences. There are 608 students registered under the supervision of a pre-medical adviser. Of this number, 436 are premedical students, 90 pre-dental, 9 pre-veterinarian, 24 pre-technologist, 33 pre-nursing, 3 preoptometry, and 13 miscellaneous. They are distributed throughout the four years as follows: 187 freshmen, 151 sophomores; 150 juniors; 84

seniors; 4 graduate students; and 32 who may be termed special students.

It is the pre-medical students who are of especial interest to us. Of the 436 pre-medical students, it is estimated that 375 are *bona fide* residents of West Virginia. It will be remembered that most medical schools require three years of pre-medical education. This presumably explains the marked decrease in the number of senior pre-medical students. There are, of course, a few schools which require a bachelor's degree for entrance.

The question naturally arises as to what becomes of all these pre-medical students, since only a limited number can be accepted by medical schools. Many of them give up the thought of studying medicine. They find out rather early that they do not like or are not fitted for the biological and physical sciences. Some find, for example, chemistry and physics too difficult. Others realize that their pre-medical grades are so low that in all probability they will never gain admission to an approved medical school. Some of them specialize in ancillary branches of medicine such as medical technology or x-ray technology.

There probably are a number who never had a wholehearted desire to study medicine, but enrolled as pre-medical students to please their parents or other relatives. Undoubtedly there are some students who earnestly desire to study medicine in spite of their low grades and make heroic efforts to gain admission into an approved medical school. Failure to do so forces them to enter other fields. At times these students will apply to osteopathic or even chiropractic institutions.

Since there are so many more pre-medical students than medical schools can accommodate, it would be desirable if some means could be found to weed out those who are making poor scholastic records. One logical method of approach would be to start the screening process as early as possible — certainly at the end of their first year of pre-medical work. Pre-medical grades are still the best criterion to use in the selection of medical students. If a student were not doing well in his pre-medical work, it would seem quite in order to notify the student and his family that it would be advisable for him to discontinue. This would save many disappointments and misunderstandings. Even more important, it would give the student an opportunity to seek another field of work at a much earlier age by preventing him, in a measure, from wasting two or three years on work for which he is unfitted.

DENTAL EDUCATIONAL PROBLEMS

Dr. Donzie Lilly, of Athens, President of the West Virginia State Dental Society, writing in the current issue of the West Virginia Dental Journal, has this to say with reference to the importance of providing complete facilities for educating dental students in this state:

> "No more serious problem faces our Society than that of finding some solution relative to the placement of our youth who elect to enter the field of dentistry. With out-of-state schools trying to accommodate the youth of their own areas they find it expedient to limit or deny admission to many students who make application from our state. Added to this is the related problem of our state having no school of dentistry as an integral part of our University's professional program.
>
> "Your president earnestly asks you to give your best thought to the solution of this pressing problem. Since this will be 'Legislature' year, we should avail ourselves of the opportunity of presenting this problem in the hope that our legislators, understanding the significance of this basic problem, may find some means of helping us to a solution. We should begin to make effective plans, even now, that will lead to a realistic solution of this — our problem."

West Virginia now provides half an education for medical students and none for dental students. The establishment of a four-year school of medicine and dentistry in this state will, we sincerely believe, in a large measure help to solve our doctor and dentist shortage.

When we provide complete education for our medical and dental students, we will no doubt find that a much greater percentage of graduates in these two professions will locate permanently for practice in West Virginia.

CHRISTMAS SEALS

The 42nd annual Christmas Seal Sale of the tuberculosis associations of the state and nation began with the mailing on Thanksgiving Day of 5 billion Seals to the people of the nation. Forty-nine million Seals were delivered to West Virginians in approximately 250,000 individual letters.

Contributions received through the sale of these Seals support the work of the West Virginia Tuberculosis and Health Association and its affiliated county associations, the major activities being health education, case-finding, mass x-ray surveys, diagnostic clinics, nursing service, rehabilitation, and social service to the tuberculous and their families.

Doctors recognize that, with proper and adequate public education, case-finding, isolation and treatment, tuberculosis can be controlled in the foreseeable future. Christmas Seal contributions play a large part in making these activities possible.

DOCTORS AND DENTISTS

Comment in the state press concerning the establishment of a four-year school of medicine and dentistry in West Virginia has, for the most part, been favorable. The following editorial appeared in a recent issue of the Wheeling Intelligencer:

"In a current issue of The West Virginia Medical Journal, a publication of the West Virginia State Medical Association, the President, Dr. Thomas Bess, hails the prospect of establishing a four-year school of medicine and dentistry for West Virginia University. Concerning this program, recently endorsed by the State Medical Association, Dr. Bess writes:

" 'I know that the young people of this state who in the future will want to study medicine or dentistry will look upon the action of the West Virginia State Medical Association with a feeling of thankfulness and security. They in time may be a grateful group who will return to our rural areas and provide our people with the complete medical care and health service we are so anxious to give.'

"We share profoundly in the hopes expressed by Doctor Bess. West Virginia has lagged too long in the field of the public's health. We have some of the finest doctors and surgeons in the world, but all of them were educated at other universities, and some doubtless were lost to our state because of that fact.

"New U. S. public health laws are in being, and others doubtless are yet to come. While we do not favor the so-called socialization of medicine, we nevertheless realize there is a sense of urgency in such projects as the proposed medical college for West Virginia. It is a pity so many millions of educational dollars are wasted on lesser or subordinate institutions, while our University's needs are neglected.

"Undoubtedly the next legislature will be responsive to public desires in enlarging next year's appropriations for the University. Whether at Morgantown or elsewhere, these facilities are sorely needed. We can all be certain of this one thing:

"The boys and girls of West Virginia are going to demand that there be provided, within their own state, educational facilities second to none in the nation.

"That, we believe, is a basic right of these fine young boys and girls. Those who oppose it for the sake of selfish pecuniary gain are, in our opinion, taking a very erroneous course. While it is a pity we get so comparatively little educational value for the millions already spent, owing to horse-and-buggy diversification and scatterment of our educational facilities, we face a condition and not a theory. The state of West Virginia cannot afford anything less than one of the finest universities in our land, unless the state expects to commit educational and social suicide.

"And while we are looking into the future it must be insisted with greater effect than ever that the school facilities for our Negro citizens, who are highly valued as most worthy patriots, be fully equal to those afforded any other group of citizens. Any other course is a reflection upon our intelligence."

ARGUMENT FOR WORK

Recent writings on the subject deny emphatically that overuse of the brain will hasten the aging process. On the contrary, they say aging is likely to be faster in a little-used brain.—J. F. in Ohio State Medical Journal.

General News

BOARD OF GOVERNORS NAMES SPECIAL COMMITTEE ON FOUR-YEAR SCHOOL

The special committee appointed by Dr. W. H. St. Clair, chairman of the Council of the West Virginia State Medical Association, to present to the Board of Public Works the Association's proposal for a four-year school of medicine and dentistry, is in session at Parkersburg as this issue of the Journal goes to press. The committee is composed of Dr. D. A. MacGregor, chairman; and Drs. Thomas Bess, Thomas G. Reed, Frank V. Langfitt, Thomas L. Harris, Walter E. Vest, and Frank J. Holroyd.

Members of a special committee from the Board of Governors of West Virginia University will meet with the Association's committee early in December. This group is composed of Mr. Thomas Millsop, of Weirton, chairman; and Messrs. Raymond Salvati, of Huntington, and E. G. Otey, of Bluefield.

Board of Governors Acts

The whole matter of the establishment of a four-year school of medicine and dentistry was considered at an extended meeting of the Board of Governors, held at Morgantown, October 29-30. At the conclusion of the discussion concerning this important project, the following resolution was unanimously adopted:

"The Board of Governors has had under consideration the proposal of the West Virginia State Medical Association for the establishment of a four-year medical and dental college as part of West Virginia University.

"The need for this professional training in West Virginia, as shown by the State Medical Association's studies, is fully recognized by the Board of Governors whose members acknowledge and appreciate the Association's efforts to aid the University to solve this problem through expansion and enlargement of its existing medical school.

"The Board unanimously favors the expansion of the University's present two-year medical college to a full four-year college of medicine and dentistry if and when it shall appear that funds for the required Capital Expenditures and operating costs therefor shall be available without prejudice to the needs of existing programs being carried on in the University's established academic and professional schools and colleges.

"The University's urgent needs have been set forth in the University budget already forwarded to the State Board of Public Works.

"The Board of Governors and the President of the University will be glad to cooperate with the representatives of the West Virginia State Medical Association and the West Virginia Board of Public Works in exploring to the fullest extent the possibility of beginning the expansion of the present two-year medical school to a full four-year medical and dental college."

Subsequently, the Board appointed its three-member special committee to consult with the State Medical Association committee concerning further steps that are to be taken with reference to the establishment of this school. The Board of Governors of West Virginia University is composed of T. E. Millsop, Weirton, Chairman; and Mrs. Jane S. Hill, Camden-on-Gauley; E. G. Otey, Bluefield; Thomas L. Harris, M. D., Parkersburg; A. C. Spurr, Fairmont; K. Douglas Bowers, Beckley; Charles E. Hodges, Charleston; Wm. G. Thompson, Montgomery; and Raymond Salvati, Huntington.

BPW Hearing Requested

The Association's special committee has requested a hearing before the Board of Public Works sometime in December and it is thought that this hearing will be held after the middle of the month. The University budget submitted to the budget director carries an item of $2,000,000 for a medical school, and the State Medical Association is asking for the appropriation from surplus state funds of $3,800,000 for the construction of a 200-bed chronic diseases hospital and school of nursing.

The Council and the Association's two key committees have unanimously gone on record as favoring the establishment of the school, with the hospital and nursing school, at Charleston, and enabling legislation for these projects will be sought during the regular session of the legislature which convenes in January.

Hospital Offers Facilities

The full facilities of Charleston Memorial Hospital have been offered for teaching and clinical purposes by the self-perpetuating board of trustees. It is proposed to have the medical and dental school, and the additional hospital and school of nursing constructed upon a tract of land adjoining the site of the Charleston Memorial Hospital. According to the best information available, ground will be broken for this hospital early in the Spring of 1949.

Dental Society Names Committee

The West Virginia State Dental Society has named the following committee to consult and cooperate with the State Medical Association's committees in the matter of the establishment of a four-year school of medicine and dentistry in this state:

Dr. N. H. Baker, Charleston, chairman; and Drs. C. R. Singleton, Charleston; M. H. Nicholson, Bluefield; Charles Drake, Huntington; W. R. Kennedy, Clarksburg; H. W. Burnett, Fairmont; Carl Kennedy, Montgomery; C. H. Higgins, Beckley; W. R. Loper, Wheeling; W. R. Batson, Pine Grove; W. W. Curry, Holden; W. R. Kiser, Romney; E. L. Houck, Lewisburg; and E. D. Douglas, Parkersburg.

PHC MEETS JAN. 3-5, 1949

The winter meeting of the public health council will be held at the Daniel Boone Hotel in Charleston, January 3-5, 1949, for the purpose of examining applicants for licensure in West Virginia.

COUNCIL TO ACT ON PLAN FOR STATE HEALTH DEPARTMENT REORGANIZATION

Sub-committees of the West Virginia State Medical Association which have been considering plans for the submission of a state health department reorganization bill at the forthcoming session of the legislature have about completed their work, and the plan should be ready for Council consideration shortly after the first of December.

Late in November, the sub-committee on the proposed composite medical licensing board will take final action looking towards the possible incorporation of this section in the reorganization bill.

It is proposed to create a state board of health, to be composed of professional and lay members, which would take over all the duties now being handled by the Public Health Council with the exception of the licensing of doctors to practice in this state.

A new medical licensing board would be established, and the functions of the board would be confined to matters concerned with licensure.

All departments and bureaus of the state health department would be placed under the supervision of the State Board of Health, and this supervision would also extend to all state-owned and state-maintained mental, tuberculosis, and general hospitals.

The board would have powers similar to those heretofore conferred by legislative action upon the Board of Governors of West Virginia University.

700 SIGN FOR GROUP INSURANCE

More than half of the members of the West Virginia State Medical Association have filed application for health and accident insurance under the group policy being written by the Continental Casualty Company.

The master policy became effective November 1, and individual policies are being mailed to all members who are participating in the plan.

DEFERMENT FOR MEDICAL STUDENTS

Dr. George F. Lull, Secretary and General Manager of the American Medcial Association, in his weekly letter dated November 15, reports that General Lewis B. Hershey, Selective Service Director, has recommended deferment of medical students to assure the nation of an adequate supply of physicians, dentists, and other medical practitioners. The memorandum has been mailed to the 3,657 draft boards over the country.

This policy, which affects 44,000 students in medical professional or pre-professional schools, is designed to maintain the current level of graduations from the professional schools in medicine, dentistry, veterinary medicine, and osteopathy. The deferment policies affecting medical and scientific students are entirely advisory and are not binding upon the local draft boards, which will decide the deferments on the merits of each individual case.

ROSTER OF MEMBERS OF LEGISLATURE WHO WILL SERVE DURING 1949 SESSION

The 1949 session of the West Virginia legislature will convene in Charleston January 12, at noon.

The official roster will not be compiled until the names of elected members have been certified to the Secretary of State; however, the following is the unofficial roster of members of the Senate and House of Delegates who will serve during the 1949 session:

SENATE

District	Member
First	*William A. Hannig (R), Elm Grove Herbert Traubert (D), Follansbee
Second	*Donald Van Camp (R), Middlebourne Theodore M. Bowers (R), New Martinsville
Third	*H. S. Boreman (R), Parkersburg Harry E. Moats (R), Harrisville
Fourth	*Orton R. Karickhoff (R), Spencer Bartow Jones (R), Pt. Pleasant
Fifth	*Andrew R. Winters (D), Huntington C. H. McKown (D), Wayne
Sixth	*Glenn Taylor (D), Matewan William Mitchell (D), Welch
Seventh	*Lloyd Jackson (D), Hamlin Glen Jackson (D), Logan
Eighth	*Charles M. Love, Jr. (D), Charleston John E. Amos (D), Charleston
Ninth	*Eugene L. Scott (R), Beckley Dr. Ward Wylie (D), Mullens
Tenth	*Forest L. McNeer (D), Hinton W. Broughton Johnston (D), Princeton
Eleventh	*John H. Bowling (D), White Sulphur Springs J. Alfred Taylor, Jr. (D), Fayetteville
Twelfth	*Henry J. McKinley (D), Elkins Fred C. Allen (D), Marlinton
Thirteenth	*Hardin R. Harmer (R), Shinnston Floyd D. Boner (D), Salem
Fourteenth	*Don J. Eddy (D), Morgantown C. Howard Hardesty (D), Fairmont
Fifteenth	*Dayton R. Stemple (R), Philippi A. L. Reed (R), Newburg
Sixteenth	*Harvey D. Beeler (R), Berkeley Springs Ralph J. Bean (D), Moorefield

(D) Democrat — Democrats 20
(R) Republican — Republicans 12
(*) Hold-over Senators, elected in 1946. — Total 32

HOUSE OF DELEGATES

County	Members
Barbour	Robert L. Hunt (D), Philippi
Berkeley	Stewart A. Wright (D), Martinsburg
Boone	E. E. White (D), Madison
Braxton	Doyle F. McLaughlin (D), Gassaway
Brooke	A. F. Young (D), Wellsburg
Cabell	William C. Campbell (D), Huntington Mike Casey (D), Huntington W. Arch Leap (D), Huntington Ford F. Roberts (D), Milton Henry F. White (D), Huntington
Calhoun	Lewis E. Smith (D), Big Bend
Clay	Sylvester Mullins (D), Clay
Doddridge	P. Douglass Farr (R), West Union
Fayette	Joe Lilly (D), Oak Hill R. L. Matthews (D), Montgomery Earl Prather (D), Oak Hill Mrs. Nell W. Walker (D), Winona
Gilmer	Paul H. Kidd (D), Glenville
Grant	Dan W. Mouse (R), Pansy
Greenbrier	Brack L. Campbell (D), Rupert Claude E. McLaughlin (D), Lewisburg
Hampshire	William L. Powell (D), Romney
Hancock	Robert E. Roach (D), New Cumberland
Hardy	George Trumbo, Jr. (D), Milam
Harrison	Fred H. Caplan (D), Clarksburg Sam Ellis (D), Clarksburg Frederick H. Scanes, Jr (D), Clarksburg W. Guy Tetrick (D), Clarksburg
Jackson	Bradford Sayre (R), Cottageville
Jefferson	William P. C. Perry (D), Charles Town
Kanawha	Pat Board, Jr (D), Charleston J. Hornor Davis (D), Charleston Charley Goff (D), Charleston A. V. Greenlee (D), Charleston Frank A. Knight (D), South Charleston James W. Loop (D), Charleston Melton M. Maloney (D), Charleston Charles G. Peters (D), Charleston
Lewis	Rush D. Holt (D), Weston
Lincoln	Cesco Isaacs (D), West Hamlin
Logan	W. E. Flannery (D), Man Jerry E. Stidham (D), Holden Curtis B. Trent, Jr. (D), Logan
Marion	Fred L. Doringer (D), Fairmont Clarence L. Hall (D), Fairmont A. James Manchin (D), Farmington
Marshall	Karl M. Jones (D), Wheeling Thomas E. Wilkison (D), Moundsville
Mason	George A. Rairden (R), Leon
McDowell	J. M. Cyphers (D), Gary W. L. Mills (D), Kimball Harry R. Pauley (D), Iaeger James L. Whitt (D), Welch Bernard H. Woodyard (D), Welch
Mercer	O. H. Ballard (D), Princeton Paul S. Hudgins (D), Bluefield E. H. Martin (D), Athens
Mineral	George E. Barger (D), Keyser
Mingo	Toney E. Cline (D), Baisden Hiram Phillips (D), Sprigg
Monongalia	Charles A. Branney (D), Morgantown Ernest Richards (D), Morgantown
Monroe	Sherman H. Ballard (R), Peterstown
Morgan	Ward M. Dawson, Sr. (R), Berkeley Springs
Nicholas	O. J. Carroll (D), Summersville
Ohio	Russell A. Burt (D), Wheeling E. J. Doyle (D), Wheeling George F. Beneke (R), Wheeling E. J. Flaccus (R), Wheeling
Pendleton	William McCoy (D), Franklin
Pleasants	J. C. Powell (R), St. Marys
Pocahontas	June McElwee (D), Marlinton
Preston	Richard Whetsell (R), Kingwood
Putnam	Dorsel E. Smith (D), Buffalo
Raleigh	W. A. Burke (D), Beckley Robert C. Byrd (D), Crab Orchard William H. File, Jr. (D), Beckley
Randolph	Thomas P. Snelson (D), Huttonsville
Ritchie	Harold Zinn (R), Pullman
Roane	R. L. McCulty (R), Spencer
Summers	C. D. McCormick (D), Hinton
Taylor	John R. Nuzum (D), Grafton
Tucker	Harold W. Shaffer (D), Parsons
Tyler	Cecil H. Underwood (R), Sistersville
Upshur	H. Hayden Morgan (R), Adrian
Wayne	Jonah Adkins (D), Ceredo H. T. Tucker (D) Huntington
Webster	Carp Robinson (D), Webster Springs
Wetzel	Herbert Schupbach (D), New Martinsville
Wirt	H. E. Pomroy (D), Elizabeth
Wood	Rolla Johnston, Jr. (D), Parkersburg Spencer K. Creel (R), Parkersburg J. Allen Overton (R), Parkersburg
Wyoming	C. A. Blankenship (D), Pineville

(D) Democrat — Democrats 78
(R) Republican — Republicans 16
Total 94

ANNUAL DUES

Annual dues of $15.00 are payable January 1, 1949. Members of the West Virginia State Medical Association are requested to submit dues through their local secretary or treasurer. No dues are assessed against honorary members. Membership cards will be mailed promptly upon receipt of dues at the headquarters offices in Charleston.

LIBRARY OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA

DR. J. U. ROHR NAMED HEAD OF ANDREW S. ROWAN MEMORAL HOME

Dr. Joseph U. Rohr, of Charleston, has been named by Governor Clarence W. Meadows as superintendent of the Andrew S. Rowan Memorial Home, at Sweet Springs, in Monroe county, effective November 1. He succeeds Dr. Henry H. Hancock, who has served as superintendent since 1946. Doctor Hancock resigned in order to resume private practice at Union.

Over 300 aged and infirm men and women are being cared for at this institution, which is located about 17 miles from White Sulphur Springs. The home was opened in July, 1945, with Dr. George P. Evans, of Iaeger, as superintendent. Doctor Evans resigned in 1946 to return to private practice in McDowell county.

Doctor Rohr has practiced his specialty of urology in Charleston for 30 years. He is a native of Alum Bridge, Lewis county, and received his M. D. degree at the College of Physicians and Surgeons in Baltimore. During World War I, he served for one year as first lieutenant in the USPHS, being stationed at Nitro.

COMPENSATION FEE SCHEDULE AMENDED

At a meeting of the Council of the West Virginia State Medical Association, held in May, 1948, the following committee was appointed to confer with Workmen's Compensation Fund officials concerning a proposed revision of the fee schedule: Dr. F. A. Scott, of Huntington, chairman; and Drs. Ivan R. Harwood, Huntington, and Howard A. Swart, Charleston.

The committee has now been informed by the assistant commissioner, Mr. John C. Ward, that a slight change has been made in the schedule covering "Miscellaneous Professional Services." The change is effective November 1, 1948.

The fee for first dressing at office or hospital has been raised from $3.00 to $4.00; subsequent visits at office or hospital from $2.00 to $3.00; and home visits, $3.00 to $4.00. A limitation will be placed on the number of visits allowed for each type of injury.

A supplement to the fee schedule covering the changes made will be mailed to all doctors before the first of December.

INT. CONG. ON RHEUMATIC DISEASES

The seventh International Congress on Rheumatic Diseases will be held at the Waldorf Astoria, in New York City, May 30-June 3, 1949, immediately preceding the annual meeting of the American Medical Association, at Atlantic City, June 6-10. This will be the first meeting of this organization ever held in the United States.

The meeting is being sponsored by the International League against Rheumatism, and the host will be the American Rheumatism Association, in cooperation with the New York Rheumatism Association.

The Congress has the official sanction of the United States Department of State, which will cooperate in the issuance of official invitations. Dr. Edwin P. Jordan, of the Cleveland Clinic, is chairman of the Publicity Committee.

DIABETES COMMITTEE TO PARTICIPATE IN DIABETES DETECTION PROGRAM

The Diabetes Committee of the West Virginia State Medical Association is cooperating in the Diabetes Detection Program, which will be initiated in every section of the country on December 6 by the Committee on Diabetes Detection, of which Dr. Howard F. Root, of Boston, is chairman.

Many of the projects mentioned in the accompanying statement have already been begun or are about to be begun by the Diabetes Committee. It is felt that this important work has been given a good start in West Virginia, and the program will be vigourously prosecuted.

Diabetes detection is a type of prophylactic or preventive medicine which can be carried on by every single physician who is now in practice. It is to be hoped that all of the doctors of the state will watch for further announcements relative to this important program.

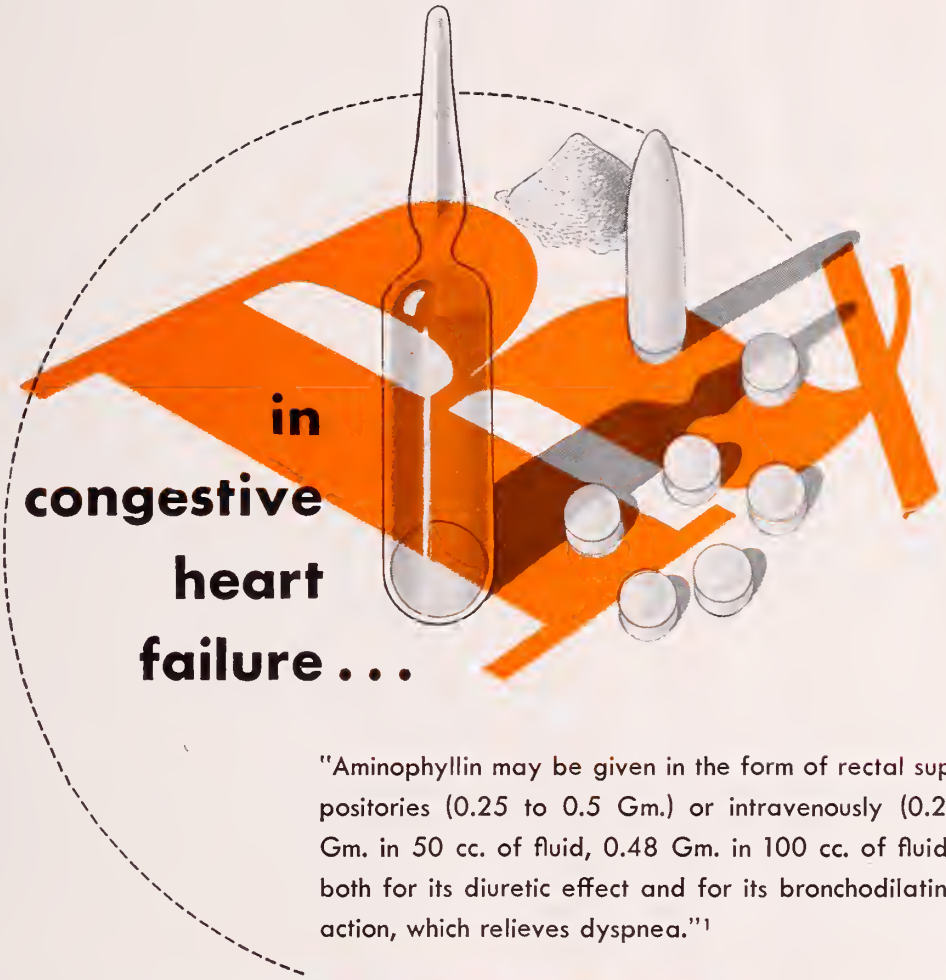
The statement follows:

The discovery and treatment of diabetes mellitus at an early stage demand the attention of all practicing physicians. Failure to discover and treat diabetes early results in preventable disabilities and impairments of health. In the Diabetes Exhibit at the Annual Meeting of the American Medical Association held in Chicago in June, 1948, it was shown that the mortality rate for diabetics first seen when a complication had occurred was three times the rate for diabetics first seen earlier and before impairments had developed. Actually the future for the diabetic patient under modern medical treatment is brighter and more hopeful today than ever before.

In 1929, Dr. George H. Bigelow and Dr. Herbert Lombard began a study of chronic disease in Massachusetts which led to the publication of statistics showing that the number of diabetic patients in Massachusetts was far higher than had been heretofore thought. In 1945, a National Health Survey was conducted which confirmed these figures. In Oxford, Massachusetts results of a survey by the United States Public Health Service indicates that at least a million undiagnosed diabetics exist in the United States and Canada.

District and state medical societies now have the opportunity to take the lead in the fight against diabetes in response to an apeal to the practicing physicians of the United States, presently being made by the Committee on Diabetes Detection of the American Diabetes Association. This committee was appointed by Dr. Charles H. Best, President, at the Annual Meeting in June, 1948. Plans are being formulated for National Diabetes Week, December 6-12, 1948.

As a first step in a full-scale attack on diabetes, eighth among the leading causes of death, a medical society should appoint its committee on diabetes. The national Committee on Diabetes Detection stands ready to assist local committees in their work. Already the Committee is preparing material containing information on diabetes for use by the physician in his own town. These materials include programs for medical meetings, radio broadcasts and spot radio announcements for use by city and county medical societies, and suggestions for cooperation with local hospitals toward the control of diabetes.



"Aminophyllin may be given in the form of rectal suppositories (0.25 to 0.5 Gm.) or intravenously (0.24 Gm. in 50 cc. of fluid, 0.48 Gm. in 100 cc. of fluid), both for its diuretic effect and for its bronchodilating action, which relieves dyspnea."[1]

SEARLE **AMINOPHYLLIN***

—meets the various dosage form requirements for congestive heart failure, bronchial asthma, paroxysmal dyspnea and Cheyne-Stokes respiration. It is supplied for oral, parenteral and rectal use.

G. D. Searle & Co., Chicago 80, Illinois

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

SEARLE

Research in the Service of Medicine

1. Orgain, E. S.: The Treatment of Congestive Heart Failure, North Carolina M. J. 8:125 (March) 1947.

*Searle Aminophyllin contains at least 80% of anhydraus theophylline.

The Committees on Post-Graduate Instruction in State and County societies should plan instruction and demonstrations in diabetes in county meetings this fall. Also, Hospital staff meetings should provide a place on their program for diabetes. Committees on Public Relations and Public Information should plan meetings for instruction of laymen, including patients, their families, and all others interested.

Women too, have an important role to play in the fight to control diabetes. It is significant that among women, diabetes is more frequent than among men. It is desirable to enlist the aid of women's organizations, especially the women's auxiliaries of the medical societies, as an adjunct to the program planned by medical societies.

Already a number of local diabetes associations affiliated with the American Diabetes Association have been formed. More such associations composed of physicians are needed. With the cooperation of the physicians within their area these associations have accepted the challenge and will strive to find and treat the million hidden diabetics. Associations will be assisted by the American Diabetes Association in attaining such objectives as more graduate courses in diabetes for physicians; providing better laboratory service; and helping with instruction for patients. Now is the time for action—will the practicing physician seize this opportunity for progress in an all-important field or will he prefer to surrender to others his responsibility for diabetes detection and treatment?

STATE DOCTORS AT SOUTHERN MEDICAL

Dr. Oscar Hunter, of Washington, D. C., was installed as president of the Southern Medical Association at the annual meeting in Miami, October 25-29. He succeeds Dr. Lucien LeDoux, of New Orleans.

The following is a list of the West Virginia doctors registered at the meeting through October 27:

Joel Allen, Charleston; Andrew E. Amick, Lewisburg; Robert W. Bess, Keyser; J. R. Bloss, Huntington; Fred E. Brammer, Dehue.

John J. Brandabur, Huntington; Donald P. Brown, Kingwood; Claude R. Davisson, Weston; David L. Ealy, Moundsville; James Arthur Eyers, Weston.

Hokie H. Fisher, Dunbar; Thomas Vincent Gocke, Clarksburg; I. F. Hartman, Buckhannon; W. E. Hoffman, Charleston; Archibald P. Hudgins, Charleston.

Jacob C. Huffman, Buckhannon; Arthur L. Jones, Wheeling; Thomas Kerr Laird, Montgomery; Ulysses G. McClure, Charleston; Thomas J. Sasser, Huntington, I. Welch Taylor, Huntington, and R. J. Wilkinson, Huntington.

1949 ROSTER OF MEMBERS

The annual roster of members of the West Virginia State Medical Association is printed in this issue of the Journal. All members are requested to check the roster and report any errors in names, addresses, or symbols.

The roster will be printed in pamphlet form the first of January for distribution to officers of component societies, state medical associations, and Journal advertisers.

RELOCATIONS

Dr. Christopher J. Buscaglia, formerly a member of the staff at Ypsilanti State Hospital, Ypsilanti, Michigan, has been named assistant superintendent of Huntington State Hospital. The appointment was announced early in November by Dr. Edward F. Reeser, the superintendent.

* * * *

Dr. Helen Belknap, of St. Albans, has moved to South Charleston where she will continue the practice of her specialty of pediatrics, with offices at 4831 MacCorkle Avenue.

* * * *

Dr. Jack L. Richardson, formerly of Williamson, has moved to Tulsa, Oklahoma. He will engage in the practice of orthopedic surgery in that city, with offices at 19 West 10th Street.

* * * *

Dr. J. P. Chapman, of Welch, has moved to Keystone, where he will continue in industrial practice.

* * * *

Dr. G. L. Todd, of Princeton, is serving a one-year assistant residency in surgery at the Cincinnati General Hospital, in Cincinnati. He will return to the Memorial Hospital in Princeton upon the completion of his residency.

* * * *

Dr. E. T. Dunn, Jr., of South Charleston, has moved to Kimberly where he will engage in industrial practice.

* * * *

Dr. G. E. Gwinn, senior medical officer at the VA offices in Clarksburg, has resigned to accept appointment as a member of the staff at Catawba Sanatorium, Virginia. Dr. David A. Watkins, of Clarksburg, is serving as acting senior medical officer at the Clarksburg VA offices.

* * * *

Dr. Thomas A. Slate, formerly of Hollidays Cove, has accepted a Mississippi-Tulane residency in obstetrics and gynecology and is now serving the second half of the residency at South Mississippi Charity Hospital in Laurel. He is an assistant in the department of obstetrics and gynecology on the staff at Tulane School of Medicine.

* * * *

Dr. Robert L. Calvert, formerly of Marmet, has completed a year's postgraduate work in pediatrics at the University of Chicago Clinics and has located at Charleston for the practice of his specialty. He has offices at 31 Brooks Street.

STATE DOCTORS ELECTED TO ACS FELLOWSHIP

The following members of the West Virginia State Medical Association were elected fellows of the American College of Surgeons at the Convocation held during the Clinical Congress in Los Angeles, October 22, 1948:

Drs. F. Lloyd Blair, Parkersburg; John S. Gaynor, Wheeling; Henry M. Hills, Jr., John T. Jarrett, and Harold H. Kuhn, Charleston; and Charles M. Polan, Huntington.

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Frazier, J. W. — "
Gallagher, Mary V. — "
Gearhart, Elmer A. — St. Albans
Gerhardt, P. R. — Albany (N.Y.)
Given, A. J. — Rensford
Glass, H. R. — Charleston
Glass, W. J. — Sissonville
Glass, W. J., Jr. — Charleston
Godbey, J. R. — "
Gordon, A. T. — Spencer
Gott, E. Fred — Charleston
Grace, James E. — Chelyan
Gray, James H. — Ward
Grisinger, G. F. — Charleston
Grisinger, Geo. F., Jr. — "
Groves, Owen A. — "
Grubb, Geo L. — "
Hager, J. L. — "
Haley, John B. — "
Haley, P. A., II — "
Hall, Carl B. — "
Halloran, R. O. — "
Hamner, C. E. — Columbus (O.)
Hamrick, R. E. — Charleston
Hamrick, R. S. — St. Albans
Hardesty, W. L. — Charleston
Harper, C. A. — Clendenin
Harper, O. M. — "
Harshbarger, Rodgers W. — St. Albans
Hash, John W. — Charleston
Hayes, E. R. — Chelyan
Heffner, Geo. P. — Charleston
Henson, E. B. — "
Henson, Edward V. — South Charleston
Hills, H. M., Jr. — Charleston
Hoffman, W. E. — "
Hogshead, Geo. W. — Nitro
Hoke, L. I. — "
Holcombe, V. E. — Charleston
Holt, John A. B. — "
Houck, M. R. — Carbon
Howell, H. H. — Madison
Hudgins, A. P. — Charleston
Hutchinson, T. H. — Malden
Ireland, R. A. — Charleston
Irwin, G. G. — "
Jarrell, C. A. — "
Jarrett, John T. — "
Jarrett, L. A. — Dunbar
Jarrett, Marion F. — Charleston
Johnson, P. C. — Belle
Jones, Ralph J. — Charleston
Jordan, E. V. — "
Kammer, A. G. — South Charleston

Kessel, C. R. — Ripley
Kessel, Ray — Charleston
Kessel, Russell — "
Ketchum, R. D. — "
Koenigsberg, Max — "
Kuhn, Beatrice H. — "
Kuhn, Harold H. — "
Lampton, Arthur K. — "
Lance, V. L. — "
Law, H. D. — "
Lewis, C. E. — "
Lilly, Goff P — "
Lilly, J. P. — "
Lilly, Milton, Jr. — Chicago (Ill.)
Litsinger, E. A. — Charleston
Litton, A. C. — "
Louft, R. R. — "
Lovejoy, U. C. — "
Lutz, John E. — "
Mace, V. E. — "
Mantz, Theodore P. — "
Marquis, Henrietta — "
Marquis, J. N. — "
Matthews, L. B. — "
McClanahan, Rose — "
McClue, A. E. — Dunbar
McClure, U. G. — Charleston
McLaughlin, R. S. — "
*McMillan, W. A. — "
McMillan, W. O. — "
McNamara, R. J. — "
McPherson, H. D. — Eskdale
Mendeloff, M. I. — Charleston
Mican, H. M. — "
Milhoan, A. W. — Nitro
Miyakawa, George — Charleston
Morison, O. N. — "
Moser, Lyle A. — "
Mynes, L. H. — "
Nelson, George O. — Nitro
Newhouse, N. H. — "
Niedermyer, J. W. — "
O'Dell, Richard N. — "
Palmer, G. F. — New Orleans, (La.)
Pearcy, Thompson — Charleston
Peck, Earl M. — "
Pence, R. E. — South Charleston
Peters, J. T. — " "
Peterson, V. L. — Charleston
*Phillips, S. H. — St. Albans
Point, W. W. — Charleston
Polsue, W. C. — "
Powell, Charles W. — "
Preiser, Philip — "
Price, A. M. — Madison
Price, R. B. — Charleston
Pushkin, Willard — "
Putschar, W. J. G. — "
Quick, James C. — Clendenin
Reed, T. G. — Charleston
Reel, F. C. — "
Reeves, J. N. — "
Revercomb, P. H. — "
Rice, Wm. R. — Dunbar
Ritter, H. H. — Charleston
Robertson, G. C. — "
Robertson, H. L. — "
Robertson, W. S. — "
Robins, J. E., Jr. — "
Robinson, J. H. — "
Rohr, J. U. — Sweet Springs
Rossman, Wm. B. — Charleston
Rucker, J. E. — "
*Schoolfield, G. C. — "
Seletz, A. A. — "
Selman, J. H. — "
Seltzer, Jos. P. — "

* Honorary Member.

Sexton, Richard J. — Charleston
Shamblen, Earle L. — "
Shawkey, A. A. — "
Shepherd, E. M. — "
Shepherd, W. S. — "
Shirkey, W. F. — "
Skaff, Victor S. — "
Skaggs, J. S. — Knoxville (Tenn.)
Skaggs, J. W. — Nitro
Slaughter, J. F. — Charleston
Smith, A. A. — Clay
Smith, B. A. — Spencer
Smith, C. B. — Charleston
Souleyret, S. B. — Cabin Creek
Soulsby, P. C. — St. Albans
Spector, Horatio A. — Charleston
Spencer, T. N., Jr. — South Charleston
Squire, E. W. — Charleston
Staats, Charles E. — "
Stanley, L. P. — "
Starcher, R. C. — Ripley
Stewart, W. C. — Charleston
Stoeckel, Catherine R. — "
Stoeckel, J. Edwin — "
Stork, A. Robt. — Logan
Summers, R. R. — Charleston
Swart, Howard A. — "
Thompson, H. G. — "
Thornhill, W. A., Jr. — "
Tuckwiller, P. A. — "
Vaughan, E. O. — St. Albans
Vial, Horce, R. W. — South Charleston
Ward, Harold W. — Charleston
Watts, C. N. — "
Webb, R. L. — "
Whiteside, C. T. — Kayford
Wilkerson, W. V. — Highcoal
Williamson, R. G. — Los Angeles (Calif.)
Wilson, A. A. — Charleston
Wilson, W. B. — "
*Wilson, W. H. — St. Albans
Witkow, Alex — Worcester, (Mass.)
Wohlford, R. F. — South Charleston
Woodall, R. E. — Charleston
Work, W. F. — "

LOGAN

Altizer, A. E. — Accoville
*Aultz, L. L. — Omar
Brammer, F. E. — Dehue
Brewer, W. E. — Logan
Combes, L. G. — Holden
Davis, C. A. — Logan
Deason, V. A. — "
Farley, H. H. — "
French, A. M. — "
Greene, Joseph L. — "
Hamilton, W. P. — Chapmanville
Jamison, Frank R. — Logan
Kruger, I. M. — "
Lawson, L. W. — "
*Lawson, S. B. — "
Lyons, J. W. — Holden
*McClellan, W. T. — Ethel
Mullins, George R. — Logan
Newlin, Willard S. — Lorado
Parker, W. H. — Braeholm
Patterson, J. L. — Logan
Poling, Owen — Eskdale
Roberts, R. W. — Man
*Round, F. L. — Holden
Rowan, W. S. — Logan
Scott, Robert K. — Slagle
Smith, B. D. — Amherstdale
*Smith, T. C. — Slagle
Starcher, E. H. — Logan
*Steele, L. E. — "
Straughan, J. M. — Omar
Trippett, L. H. — Earling
Van Hoose, Harold — Mallory
Vaughan, R. R. — McConnell
Watson, Geo. N. — Man

MARION

Baron, L. E. — Mannington
Barr, J. M. — Worthington
Bonnar, James M. — Fairmont
Bressler, David — Monongah
Carter, C. J. — Fairmont
Clinton, J. B. — "
Collins, J. C. — "
Criss, H. L. — "
Evans, Geo. T. — Idamay
Falconer, H. S. — Fairmont
Fleming H. C. — "
Frye, R. R. — Mannington
Gotses, Paul S. — Fairmont
Grainger, G. A. — Farmington
Hamilton, D. D. — Mannington
Haynes, O. L. — Fairmont
Helmick, John P. — "
Hickson, Edward W. — "
*Holland, C. L. — "
Holland, E. A. — "
Jenkins, J. J — Farmington
Jenkins, J. J. Jr. — "
*Johnson, H. R. — Fairmont
Johnson, Philip — "
Jones, R. Harold — "
Keister, H. S. — "
*Kinney, C. L. — "
Kinney, E. R. — "
Lambert, L. R. — "
Lawson, C. S. — "
Lawson, Wm. T. — "
Mallamo, J. T. — "
Maxwell, Jos. S. — "
*Moore, P. G. — Mannington
Morgan, G. V. — Fairmont
Nolan, Lewis E. — "
Norris, L. D. — "
Nunnally, Wm. O. — "
*Offner, J. E. — "
Orr, W. W. — Rachel
*Parks, C. L. — Fairmont
Parks, Seigle W. — "
Ramage, C. M. — "
Rogers, F. B. — "
Romino, J. D. — "
Sowers, F. F. — "
Spencer, L. O. — "
Swisher, K. Y. — Fairview
*Trach, J. M. — Fairmont
Trach, J. P. — "
Traugh, G. H. — "
Tuckwiller, J. R. — "
Vacheresse, Edw., Jr. — "
Van Horn, K. L. — "
Welton, W. A. — "
Wise, E. D. — "
Yost, Herschel R. — "
Yost, Joe — "
Yost, Paul — "

MARSHALL

Arnold, J. E. — Cameron
Ashworth, Harold B. — Moundsville
*Ashworth, R. A. — "
Benson, Don S. — "
*Bone, B. F. — "
Bradford, William P. — "
Clubb, E. M., Jr. — McMechen
*Covert, O. F. — Moundsville
Dotson, Samuel C., Jr. — Cameron
Ealy, D. L. — Moundsville

Fortney, Mary J. ..... Urichsville (O.)
Grimm, R. B. ..... Cameron
Hartwig, W. B. ..... Wheeling
Hill, W. G. C. ..... Moundsville
McIlvain, W. E. ..... Huntington
*Peck, J. C. ..... Moundsville
*Striebich, J. A. ..... "
Yoho, S. F. ..... "

MASON

Brown, C. Leonard ..... Pt. Pleasant
Bryant, R. F. ..... New Haven
Glassman, Dan ..... Pt Pleasant
Long, Frank C. ..... "
McElfresh, Edward V. ..... "
*Petty, C. W. ..... Hartford

MERCER

Bird, Ben W., Jr. ..... Princeton
Blaydes, J. E. ..... Bluefield
Butte, C. I. ..... Matoaka
Calvert, J. W. ..... Lynbrook (N.Y.)
Christie, Roy E. ..... Bluefield
Clements, B. S. ..... Matoaka
Connell, H. R. ..... Bluefield
Davis, H. C. ..... "
Davidson, S. G. ..... "
Fowlkes, R. H. ..... "
Fox, J. Francke ..... "
Fox, P. R. ..... "
Fugate, R. C. ..... "
Gage, E. L. ..... "
Gatherum, Robert ..... "
Goodall, F. C. ..... Princeton
Hale, Daniel ..... "
Harloe, W. M. ..... Matoaka
Higginbotham, Upshur ..... Bluefield
Holroyd, Frank J. ..... Princeton
Horton, E. W. ..... Bluefield
Hosmer, D. L. ..... "
Hughes, C. R. ..... "
Johnston, Cecil F. ..... "
Kechele, D. V. ..... "
Kelly, V. L. ..... "
King, O. G. ..... "
Kirby, Edgar ..... "
Markell, J. I. ..... Princeton
McCauley, E. W. ..... Bluefield
McGuire, John ..... "
Neale, Richard C. ..... "
Pace, L. J. ..... Princeton
Pearson, H. P. ..... Bluefield
*Peters, I. T. ..... Princeton
Reynolds, C. J. ..... Bluefield
Rogers, R. O. ..... "
St. Clair, C. T., Jr. ..... "
St. Clair, Wade H. ..... "
St. Clair, W. H., Jr. ..... "
Scott, Charles M. ..... "
Shanklin, J. R. ..... "
*Shanklin, R. V. ..... "
Sinclair, M. W. ..... "
Slusher, W. C. ..... "
*Steele, H. B. ..... "
Stuart, R. R. ..... "
Tanner, E. M. ..... "
Todd, G. L., Jr. ..... Princeton
Van Reenan, A. C. ..... Bluefield
Vass, T. E. ..... "
Vermillion, Uriah ..... Athens
Weier, Karl E. ..... Bluefield
Yost, J. W. ..... "

* Honorary Member.

MINGO

Bentley, C. M. ..... Freeburn (Ky.)
Boland, L. F. ..... Williamson
Brewster, G. W. ..... Fort Thomas (Ky.)
Burien, Frank J. ..... Williamson
Caton, John E. ..... Delbarton
Diamond, Leon ..... Red Jacket
Drake, E. T. ..... Williamson
Easley, G. W. ..... "
Farley, James A. ..... Delbarton
Feldman, Walter S. ..... Williamson
Gamba, Carl L. ..... Red Jacket
Gaskel, J. C. ..... Williamson
Hays, H. C. ..... "
Hodge, O. P. ..... Matewan
Irvine, G. B. ..... Williamson
Johnson, J. E. ..... Stone (Ky.)
Lawson, J. C. ..... Williamson
McClees, J. E. ..... "
McClellan, Ernest E. ..... "
Peery, C. E. ..... Majestic (Ky.)
Price, W. H. ..... Chattaroy
Quincy, F. B. ..... Williamson
Rapp, Roy T. ..... "
Richardson, Jack L. ..... Tulsa (Okla.)
Stepp, E. P. ..... Kermit
Walker, W. J. ..... Iaeger
Williams, Arnold C. ..... Glen Alum
Yoho, David E. ..... Delbarton
Zando, S. G. ..... Williamson

MONONGALIA

Ashworth, Glenn ..... Morgantown
Baker, William P. ..... "
Brannon, Dorsey ..... "
Bray, C. M. ..... "
Caserta, Peter ..... "
Clark, M. Dorcas ..... Washington (D.C.)
Collins, A. B. ..... Morgantown
Crynock, P. D. ..... "
Dent, Charles F. ..... "
Douglas, Paul L. ..... Pursglove
Edstrom, Henry ..... Morgantown
Fisher, R. W. ..... "
Fleming, Robert J. ..... "
Gerchow, K. E. ..... "
Heiskell, E. F. ..... "
Heiskell, E. F., Jr. ..... "
Hobbs, Melford L. ..... "
Howell, W. H. ..... "
Johnson, C. E. ..... "
King, H. V. ..... "
King, W. E. ..... "
Lawless, J. J. ..... "
Madera, W. L. ..... "
Mahan, Charles ..... "
Maxwell, G. R. ..... "
McBee, T. Jud ..... "
Miller, F. R. ..... "
Moore, B. J. ..... "
*Moser, W. C. ..... St. Petersburg (Fla.)
Moskal, Margaret Stemple ..... Chicago (Ill.)
Phillips, G. W. ..... Morgantown
Pickett, J. C. ..... "
*Post, D. M. ..... Lawrence (Ind.)
Pride, C. B. ..... Morgantown
Pride, Maynard ..... "
Randolph, Brady F., Jr. ..... "
Rich, H. A. ..... "
Romine, C. C. ..... "
Sleeth, C. K. ..... "
Stecker, J. F. ..... "
*Stout, B. M. ..... "
Strawn, L. M. ..... "
Thompson, C. T. ..... "
Thompson, James ..... "
Trotter, J. H. ..... "
Trotter, Robert R. ..... Morgantown
Tucker, E. B. ..... "
Tucker, E. B., Jr. ..... "
Van Liere, E. J. ..... "
Warman, W. M. ..... "
Whittlesey, F. R. ..... "
*Wylie, C. B. ..... "

McDOWELL

Anderson, J. H. ..... Hemphill
Bailey, J. B. ..... Welch
Bennett, J. A. ..... Algoma
Best, Earl M., Jr. ..... Caretta
Bracey, A. H. ..... Welch
Bracey, H. A. ..... "
Bragonier, R. K. ..... Keystone
Burger, Ray E. ..... Welch
Burke, John H. ..... Gary
Camper, H. G. ..... Welch
Carr, A. B. ..... War
Castrodale, Dante ..... Welch
Champion, Jess Paul ..... Keystone
Chandler, C. B. ..... Welch
Chapman, C. B. ..... "
Clark, C. T. ..... Iaeger
Cochran, C. C. ..... Kimball
Coleman, Herbert M. ..... Louisville (Ky.)
Coulon, N. F. ..... Thorpe
Counts, W. R. ..... Welch
Davis, J. E. ..... "
Dodrill, R. Moore ..... "
Dunman, L. E. ..... Haverton (Pa.)
Dyer, N. H. ..... Charleston
Edwards, R. H. ..... Welch
Elliott, Boyce ..... Aransas Pass (Tex).
Evans, G. P. ..... Premier
Evans, H. P. ..... Keystone
Fitzpatrick, R. J. ..... Bishop (Va.)
Fleming, Robert I. ..... Bergen (N.Y.)
Gale, Richard O. ..... Welch
Gates, Edmond O. ..... "
Gibson, E. D. ..... Iaeger
Gray, Arthur M. ..... Thorpe
Hall, W. C. ..... Welch
Hatfield, D. D. ..... Yukon
Irvin, Guy E. ..... Welch
Jackson, C. F. ..... War
*Johnston, W. L. ..... Princeton
Kersey, W. W., Jr. ..... Bartley
Kirk, E. H. ..... Roanoke (Va.)
Linkous, Otis E. ..... Welch
Lovas, E. E. ..... Berwind
Milchin, Sam ..... Jenkinjones
McCarty, J. L. ..... Berwind
McKee, John S. ..... Welch
Murphy, M. J. ..... "
Murry, J. H. ..... Vivian
Ockerman, R. K. ..... DeMotte (Ind.)
Read, B. J. ..... Lynchburg (Va.)
Rivers, D. G. ..... Gilliam
Rucker, Claude N. ..... Marytown
Saunders, Irvine ..... Welch
Schiefelbein, H. T. ..... "
Sinnett, John F. ..... "
Smith, M. W. ..... Biloxi (Miss.)
*Spangler, P. C. ..... Princeton
Straub, G. L. ..... Welch
Thompson, J. W. ..... Bradshaw
Torregrossa, M. F. ..... Ashland
Vaughan, Florien ..... Hemphill
Vermillion, E. E. ..... Welch
Vick, C. W. ..... Jenkinjones
Villani, A. J. ..... Welch
Wetherby, V. L. ..... "
Young, W. B. ..... Northfork

OHIO

Abersold, G. W. — Wheeling
Ackerman, W. E. — "
Armbrecht, George L. — "
Armbrecht, R. J. — "
Azar, Philip L. — "
Bailey, R. B. — "
Bandi, R. T. — "
Belgrade, J. T. — "
Bickel, C. S. — "
*Bippus, E. S. — W. Palm Beach (Fla.)
Bird, J. D., Jr. — Wheeling
Bobes, S. S. — "
Boggs, W. C. — "
Bond, R. C. — "
Brown, George H. — "
Buffington, C. B. — "
Caldwell, J. R. — "
Clovis, C. H. — "
Clovis, E. E. — "
Cope, Paul H. — "
Copeland, H. B. — "
Del Vecchio, James J. — "
Drinkard, R. U. — "
Farri, L. B. — "
Fawcett, Ivan — "
Gaydosh, F. J. — "
Gaydosh, M. — "
Gaydosh, M. A., Jr. — "
Gaynor, John S. — "
Gill, R. D. — "
Gilmore, J. W. — "
Glass, E. F. — "
Graham, Paul V. — "
Greeneltch, D. E. — "
Haislip, N. L. — "
Hazlett, James C. — "
Henderson, O. M. — Triadelphia
Hershey, C. D. — Wheeling
Higgins, A. W. — "
Hiles, Charles H. — "
Holley, C. J. — "
Jones, A. L. — "
Jones, E. L. — "
Joseph, N. K. — "
Joseph, Wilda S. — "
Kalbfleisch, W. K. — "
Keesor, C. H. — "
Kellas, George M. — "
Klug, T. M. — "
Leslie, Warren D. — "
Lewellyn, R. H. — Elm Grove
Little, H. G. — Wheeling
Lukens, R. W. — "
Lyon, L. A. — "
MacGregor, D. A. — "
Maskrey, Frank R. — "
McClure, W. T. — "
McCoy, A. V. — Elm Grove
McCoy, C. G. — "
McCurdy, J. A. — Wheeling
McCuskey, W. C. D. — "
McLain, W. H. — "
Megahan, Burke — Elm Grove
Meier, J. S. — Wheeling
Moore, John M. — "
Murphy, J. H. — "
Myers, J. W. — "
Niehaus, A. J. — "
Nolte, A. E. — "
Osterman, A. L. — "
Palmer, David W. — Columbus (O.)
Pell, E. N. — Wheeling
Perilman, William — "
Phillips, Earl S. — "
Phillips, Edward M. — "
Phillips, Edward S. — "
Phillips, H. T. — Wheeling
Phillips, R. W. W. — "
Purpura, Anthony J. — "
Quimby, W. A. — "
Rankin, J. O. — "
Reed, R. J. — "
Reed, R. J., Jr. — "
Sammons, W. P. — "
Sauder, H. R. — "
Sheppe, W. M. — "
Snider, R. J. — "
Sonneborn, Robert M. — "
Spargo, James E. — "
Staats, O. M. — "
Stewart, J. K. — "
Strobel, G. E. — "
Thoner, J. G. — "
Tomassene, R. A. — "
Tretheway, S. W. — "
Vieweg, G. L., Jr. — "
Wanner, A. L. — "
Webb, W. S. — "
Weiler, H. G. — "
Williams, M. B. — "
Zubak, M. F. C. — "

* Honorary Member.

PARKERSBURG ACADEMY

Adams, W. A. — Parkersburg
Artz, C. P. — Ft. Bragg (N.C.)
Asch, J. T. — Parkersburg
Bateman, George — Williamstown
Batten, James C. — Parkersburg
Bevauqua, W. A. — "
Biddle, Robert M. — "
Blair, F. L. — "
Blair, Holmes — "
Boice, R. H. — "
Boling, John S. — Grantsville
Boling, T. R. — "
Bronaugh, Wayne — Parkersburg
*Brown, C. N. — Swandale
Brown, Delmer J. — Parkersburg
Brown, Marion S. — "
Brundage, O. H. — "
*Camp, W. C. — Spencer
Casto, O. J. — Parkersburg
Conley, Orva — "
Connolly, Ira — "
Connolly, Randall — "
Coplin, Robert W. — Elizabeth
Corbitt, Richard — Parkersburg
*Crooks, E. W. — "
Davis, R. E. — "
Davis, William W. — "
Dearman, A. M. — "
Depue, J. M. — Spencer
Dick, William S. — Parkersburg
Fankhouser, Robert — "
*Fisher, M. O. — "
Fosnaugh, Robert P. — "
*Gaynor, H. E. — "
Gilbert, H. F. — "
Gilmore, M. A. — "
Goff, S. W. — "
Goff, W. R. — "
Goodhand, Charles — "
Hamilton, Richard — St. Marys
Harris, T. L. — Parkersburg
Harsha, G. M. — Sistersville
Hartman, E. C. — Parkersburg
Hively, H. D. — Omar
Holmes, E. B. — Parkersburg
Hovis, Logan — "
Jones, A. M. — "
Jones, James P. — Pennsboro
Jones, L. P. — "
Judy, W. J. — Parkersburg
Keith, T. W. — Harrisville
Keller, F. D. — Omar
Kizinski, A. B. — Parkersburg
Kizinski, I. M. — "
King, C. E. — "
*Kraft, C. D. — "
Lattimer, R. D. — "
Leeson, L. R. — "
Lincicome, Robert — "
Lutz, Athey R. — "
McCuskey, Paul L. — "
*Miller, R. B. — "
Moore, Dana T. — "
Newman, R. C. — Spencer
Nicholson, B. B. — Parkersburg
Paden, Russell H. — "
Potter, Fred J. — "
Prickett, D. C. — "
Priddy, N. D. — Ravenswood
Prunty, S. M. — Parkersburg
Quillen, O. L. — St. Marys
*Rogers, J. G. — Parkersburg
Rogers, Watson F. — "
Santer, M. A. — "
Sheridan, Richard — "
Sidell, A. R. — Williamstown
Staats, E. D. — Ripley
Stark, Jack J. — Belpre (O.)
Starkey, P. C. — Ravenswood
Thrasher, E. L. — Sistersville
Ulch, H. W. — Parkersburg
Veon, H. H. — "
Wade, James L. — "
Walton, L. E. — Pennsboro
Wharton, R. H. — Parkersburg
Widmeyer, R. S. — "
*Wise, S. D. H. — "
Woofter, A. C. — "
*Wright, E. L. — "
Yeager, W. R. — "

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Berry, P. E., Jr. — Piedmont
Bess, Robert W. — "
Bess, Thomas — Keyser
Brooks, O. V. — Moorefield
Brown, James D. — Romney
Coffman, Harry — Keyser
Coffman, Robert T. — "
Courrier, E. A. — "
Dailey, R. W. — Romney
Dyer, V. L. — Petersburg
Easton, J. F. — Romney
Flick, W. A. — Keyser
Giffin, T. C. — "
Grove, J. B. — Petersburg
Hartle, Gerald E. — Moorefield
Huffman, T. T. — Keyser
Johnson, S. B. — Franklin
Love, R. W. — Moorefield
Maxwell, M. H. — "
McCoy, Archibald — Petersburg
Mitchell, O. F. — Franklin
Moyers, B. F. — Mathias
Reynolds, O. S. — Franklin
Sites, Charles J. — "
Veach, Lysle T. — Petersburg
Wilson, P. R. — Piedmont
Wolverton, J. H. — "
Wolverton, J. H., Jr. — "

PRESTON

Arnett, J. C. ..... Rowlesburg
Brown, Donald P. ..... Kingwood
Butler, A. K. ..... Newport News (Va.)
Cashman, Harold H. ..... Hopemont
Davis, DelRoy R. ..... Kingwood
*Fortney, F. D. ..... Beckley
Jamison, W. P. ..... Oakland (Md.)
Johnson, W. P., Jr. ..... Arthurdale
Lehman, J. F. ..... Kingwood
McIntire, T. S. ..... "
McLane, R. A., Jr. ..... Masontown
Miller, B. B. ..... Eglon
Miller, H. C. ..... "
Moser, C. Y. ..... Kingwood
Salkin, David ..... San Fernando (Cal.)
Smith, C. E. ..... Terra Alta
Starkey, A. L. ..... Hopemont
Steger, William J. ..... "
*Watson, E. E. ..... Kingwood
White, S. R. ..... Bruceton Mills

RALEIGH

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Banks, F. L. ..... Beckley
*Banks, M. C. ..... Raleigh
Batalion, A. L. ..... Ameagle
Bowles, A. G. ..... Beckley
Broaddus, R. G. ..... "
Chambers, R. W. ..... "
Coram, J. M. ..... "
Covey, W. C. ..... "
Covey, W. C., Jr. ..... "
Cunningham, G. R. ..... Tams
Cunningham, W. H. ..... Beckley
Daniel, D. D. ..... "
*Daniel, G. P. ..... Glen Daniel
Daniel, R. P. ..... Pemberton
Daue, E. O., Jr. ..... Beckley
Davis, Charles E., Jr. ..... Norfolk (Va.)
Dupuy, Samuel S. ..... Scarbro
Edwards, Hugh S. ..... Beckley
Ford, S. A. ..... "
Garrett, T. F. ..... Sprague
Godbey, John Q. ..... Glen Daniel
Gwinn, G. E. ..... Catawba (Va.)

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Harkleroad, F. S. ..... "
Harvey, Harold E. ..... "
Heagarty, John P. ..... Layland
Hedrick, E. H. ..... Beckley
Hedrick, G. C., Jr. ..... "
Hedrick, John E. ..... "
Houser, L. G. ..... "
*Jarrell, D. B. ..... "
*Johnson, G. W. ..... McAlpin
Joseph, Alfred ..... Montcoal
Kessel, Clark ..... Beckley
King, E. L. ..... Olive View (Cal.)
Lilly, Wallace B. ..... Beckley
Mays, W. C. ..... Stanaford
McKenzie, J. E. ..... Beckley
*Mitchell, R. C. ..... Sophia
*Moore, F. J. ..... Beckley
Moran, W. G., Jr. ..... Cranberry
Newman, J. W. ..... Pemberton
Newman, Ross E. ..... Beckley
Peter, B. K. ..... "
Pomputius, W. F. ..... Helen
Ralsten, M. M. ..... Beckley
Rardin, W. H. ..... "
Richmond, B. B. ..... "
Richmond, W. Fred ..... "
*Riley, W. M. ..... Whitby
Ruark, W. T. ..... Beckley
Sato, Sam I. ..... Slab Fork
Shaffer, H. A. ..... Beckley
Shrewsbury, L. E. ..... "
Smith, C. A. ..... Raleigh
Smith, Meryleen ..... Rich Creek (Va.)
Smith, Robert J. ..... "
Tieche, A. U. ..... Beckley
Vaughan, P. E. ..... "
Vermillion, T. U. ..... "
Whitlock, J. W. ..... Affinity
Willard, E. H. ..... Beckley
Wray, Everett B. ..... Stotesbury
*Wriston, Robert ..... Beckley

SUMMERS

*Cooper, O. O. ..... Feather Falls (Cal.)
Holmes, Albert W. ..... Hinton
Howard, C. L. ..... "
Johnson, J. T. ..... "
McNeer, B. W. ..... "
McNeer, F. L. ..... "
Pence, G. L. ..... "
Ritter, D. W. ..... "
Stokes, J. W. ..... "
Van Sant, W. L. ..... "

TAYLOR

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Haislip, Charles A. ..... "
Heironimus, T. W., Jr. ..... "
Kimble, J. U. ..... "
McMullin, Jos. F. ..... Grafton
Shafer, C. F. ..... "
Shanes, Herbert N. ..... "
Stout, R. D. ..... "
Stroud, C. G. ..... Flemington
Trippett, K. H. ..... Galloway
Warden, Paul P. ..... Grafton

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Coffield, O. T. ..... "
Dyer, A .M., Jr. ..... Pine Grove
Gordon, T. B. ..... New Martinsville
Hornbrook, Kent M. ..... " "
*Martin, F. E. ..... " "
Miller, R. F. ..... Paden City
Pyles, John W. ..... New Martinsville
Theiss, John O. ..... " "
Viggiano, M. A. ..... " "
Zinn, R. H. ..... Hundred

WYOMING

Biggart, J. F. ..... Mullens
Burns, Kendall R. ..... Coal Mountain
Hatfield, R. C. ..... Oceana
Khorozian, K. G. ..... Pineville
Mangus, J. E. ..... "
Penn, F. H. ..... Mullens
Steele, B. W. ..... "
Taylor, Harwood A. ..... "
Upchurch, C. T. ..... Kopperston
Wilkinson, D. D. ..... Wyco
Wilkinson, E. M. ..... Pineville
Wylie, Ward ..... Mullens
Zsoldos, F. J. ..... Glen Rogers

Obituaries

ABNER OSBURN ALBIN, M. D.

Dr. Abner Osburn Albin, 72, of Charles Town, died November 15, 1948, at his home in that city. Death followed an illness of several months duration.

Doctor Albin received his academic training at Shepherd State Teachers College, and his M. D. degree at the College of Physicians and Surgeons, Baltimore, in 1903.

He had practiced his specialty of surgery in the Eastern Panhandle until his retirement a few months ago on account of ill health. He was a former member of the Eastern Panhandle Medical Society, the West Virginia State Medical Association, and the American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. Raymond Riddleberger, and a brother, Louis Albin, both of Jefferson county.

* * * *

SAMUEL WALTER COTTLE, M. D.

Dr. Samuel Walter Cottle, 49, of Morgantown, died October 31, following a severe head injury sustained in a fall at his home in that city.

Doctor Cottle received his M. D. degree at the University of Louisville School of Medicine in 1925, and was licensed to practice in West Virginia in 1927. He located at Morgantown, where he continued in active practice until his death.

He was a member of the Monongalia County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

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REFERENCES

CLASSIFIED ADVERTISEMENTS

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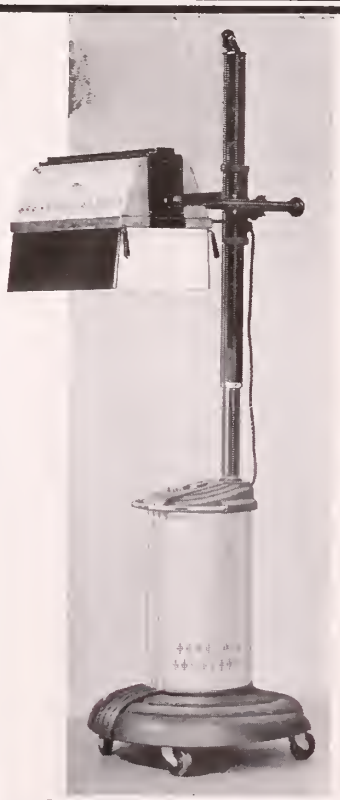
WANTED—Middle-aged doctor for practice in industrial hospital near Charleston. Write Box J, care West Virginia Medical Journal, Box 1031, Charleston 24, W. Va.



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JAMES REASON VERMILLION, M. D.

Dr. James Reason Vermillion, 76, of Princeton, died at his home in that city June 20, 1948.

Doctor Vermillion was born at Athens, West Virginia. He received his academic training at Concord College, and his M. D. degree at Maryland Medical College, Baltimore, in 1900. He was licensed to practice in West Virginia that same year and located at Palmer, West Virginia. He moved to Princeton in 1906 where he continued to practice his specialty of EENT until his retirement a few years ago. He served with the Medical Corps of the Army during World War I, being stationed at Fort Oglethorp, in Georgia.

Doctor Vermillion was an honorary member of the Mercer County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

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Book Reviews

MANUAL OF UROLOGY—By Ralph M. LeComte, M. D., F.A.C.S. Fourth Edition. The Williams and Wilkins Company, Baltimore, Md. 1948.

As stated in the preface of the first edition, LeComte's Manual of Urology is written to give the beginner the ground work of the fundamentals of urology. In accordance with this intention, the work sets forth only recognized conclusions, simply and clearly stated, with no extended discussions, case reports, references, or author's opinions.

The book is divided into eleven chapters. The first considers methods of examinations, describing clearly the whys and hows of those methods which may be carried out without special instruments or training. In the next chapter on symptomatology, the author mentions the various urogential symptoms and indicates their possible significance. This chapter also contains the unique section on pain of the preceding edition. The following chapter on treatment has been especially revised with reference to the use of sulfonamides and antibiotics. Changing concepts of urinary stone causation, and the resulting change in treatment and prevention of stones are adequately described.

Thereafter the diseases of each urogential organ are dealt with in successive chapters. Systematically, causation is considered from the standpoint of con-

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genital malformation, injury, infection, neoplasm, and unknown etiology. Symptoms and treatment are given due consideration. The chapter on testicular tumors has been revised in accordance with the newer data accruing from World War II. The final section of the book is a reference section, giving a partial list of text-books and periodicals which the author consulted in the preparation of the work.

This book hardly calls for commendation by the reviewer. Its record is its own recommendation. First published in 1933, it is now appearing in its fourth edition, and has been reprinted once in the meantime. The American College of Surgeons lists it as a recommended work on urology for the hospital medical library. Written primarily for medical student and house officer, it is also a first grade reference work for the man in general practice. The William and Wilkins Company, publishers, have maintained their usual high standard of type, material, and illustrations. A word of appreciation is due author and publisher for not only having a book that the student can read profitably but one that he can also afford to buy.—G. G. Irwin, M. D.

OCCUPATIONAL THERAPY SOURCE BOOK—Sidney Licht, M. D. The Williams & Wilkins Company, Baltimore, 1948, Pp. 90. Price $1.00.

The field of occupational therapy has but recently been fully recognized as a valuable aid to the curative function of psychiatry. The need for therapeutic occupation of mental patients has long been recognized by physicians dealing with emotional problems, but unfortunately this has been accomplished in a rather undisciplined manner, thus deprivinig it of the benefits which must follow order.

The development of the profession of occupational therapy as a separate entity has been so rapid that little has been accomplished which can be recorded in an historical sense.

Dr. Licht has attempted in this small volume to tell, by means of extracts from authorities in historical areas, the development of occupational therapy from the first century before Christ.

Even for those persons who will have no direct contact with the field, this is a valuable volume in his-

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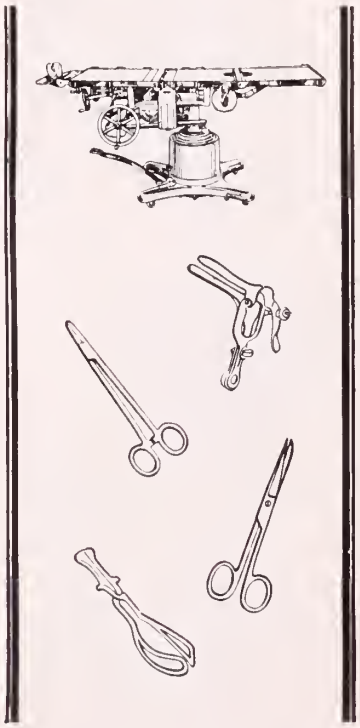
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torical psychiatric philosophy:. The first section gives a brief view of the development of occupational therapy from earliest days to the year 1917, when the first special school was established. The remainder of the book is made up of extracts from such pioneers as Pinel, Reil, Benjamin Rush, Samuel Tuke, Bsquirol, Leuret, Voisin, Kirt Bride, and Charlotte Reid.

This is not a technical book and evidently was not intended as such by its author. It is, however, in the words of Burlingame, who prepared the foreword, "A fine compilation for which those interested in occupational therapy will be eternally grateful."—Chris J. Buscaglia, M. D.

DR. THORNHILL ON ALLERGY PANEL

The fourth annual meeting of the Southeastern Allergy Association will be held January 22-23, 1949, at the Washington-Duke Hospital, in Durham, North Carolina.

Dr. George Rockwell, president of the American College of Allergists, and Dr. Walter Winkenwerder, president of the American Academy of Allergy, will be the guest speakers. There will be a panel on "Infectious Asthmas" headed by Dr. Oscar Swineford, and a panel on "Food Allergies" headed by Dr. Hal Davison. Dr. W. A. Thornhill, Jr., of Charleston, will sit as a member of this panel.

BUY CHRISTMAS SEALS

DOCTORS LICENSED BY PHC

As the result of the examination conducted by the Public Health Council October 4-6, 1948, in Charleston, 27 doctors have been licensed to practice medicine in this state, 14 by direct examination, and 13 by reciprocity with other states.

The following doctors were licensed by direct examination:

James Milton Bell, Lakin; John Sommer Blagg, South Charleston; Albert Frederick Cunningham, Morgantown; Eugene Elihu Hutton, Jr., Huttonsville; Milton Katz, Huntington.

Clyde Litton, Charleston; William Connell Patterson, Jr., Killarney; Frank McDonald Peck, Logan; George Philip Schneider, Jr., Huntington; Sidney Schnitt, Huntington.

Samuel Sanford Shorter, Philadelphia, Pa.; Thomas Malcolm Snyder, Roanoke; Robert Oscar Strauch, Cleveland, Ohio; and Robert Jay Trope, Charleston.

The following is the list of doctors licensed by reciprocity:

Henry Boone, Gary; Christopher Joseph Buscaglia, Huntington; Edwin Oliver Daue, Jr., Beckley; James August Heckman, Huntington; Thomas Jefferson Holbrook, Huntington; Joseph Elmer LaBarre, Coalwood.

Cora Clinkscales Lenox, Philippi; Joseph Frederick McMullin, Grafton; Henry Goodwin Storrs, Philippi; John Fabian Weiksnar, Iaeger; David Yospur, Dayton, Ohio; George Outhit Eaton, Baltimore, Md.; Henry Fairbanks Warden, Jr., Bluefield.

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County Society News

BARBOUR-RANDOLPH-TUCKER

The regular monthly dinner meeting of the Barbour-Randolph-Tucker Medical Society was held October 21 at the United Brethren Church, in Philippi.

A transcribed review of "Endocrine Factors in Gynecology," with lantern slides, was presented by Dr. Edna M. Jeffries, and the Schering sound movie, "Endocrine Factors in the Menstrual Cycle," was shown.

Dr. Elizabeth Hauser, of Philippi, spoke on "Endocrine Treatment in Gynecology," and Dr. Julius Berkley, of Elkins, discussed indications for treatment in various endocrine irregularities.

At the business meeting held following the scientific program, the by-laws were amended to provide for regular meetings on the third Thursday of each month from October through May. The annual dinner-dance meeting will be held regularly sometime in June.

The following doctors were elected to membership in the Society: Cora Lennox and Henry Storrs, Philippi; and Charles Mauzy, Elkins.

The Society went on record as being opposed to the proposed merger of the Blue Cross-Blue Shield service plans because plans for such merger are not sufficiently perfected and local state statutes and variations in normal fees charged for services vary to such an extent locally that plans may better suit community needs and receive physician and hospital cooperation by operation in restricted areas with close medical supervision.

A proposal for increase of local society dues from $2.00 to $25.00 per annum was held over for a vote at the next meeting.

DONALD R. ROBERTS, M. D.,
Secretary.

* * * *

CABELL

Dr. Maurice G. Buckles, of Columbus, Ohio, presented an interesting paper on "Recent Developments in Chest Surgery" at the regular monthly meeting of the Cabell County Medical Society, held October 14 at the Hotel Prichard, in Huntington. The paper was discussed by several members of the society.

The following doctors were elected members: Thomas J. Holbrook, David A. Haught, and Edward J. Evans, all of Huntington. Dr. James A. Heckman was elected a member by transfer from Allegheny County Medical Society, Pittsburgh, and Dr. C. J. Buscaglia a member by transfer from Washtenaw County Medical Society, Michigan.

The following officers were elected for 1949: President, James R. Brown; vice president, Lawrence B. Gang; secretary, Thomas B. Baer (reelected); treasurer,

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Francis L. Coffey; board of censors, Joseph Webb; delegates to the House of Delegates, C. A. Hoffman, E. J. Humphrey, and I. I. Hirchman; and alternates Francis L. Coffey, Norris F. Hines, and R. M. Wylie.

* * * *

FORT HENRY ACADEMY OF MEDICINE

Dr. Allan C. Barnes, professor and chairman of the Department of Obstetrics and Gynecology of the Ohio State University College of Medicine, Columbus, was the guest speaker at the regular meeting of the Fort Henry Academy of Medicine, held November 2, in the auditorium of the school of nursing, at Wheeling Hospital. His subject was "Indications for Gynecologic Surgery."

Doctor Barnes' paper was discussed by Dr. C. W. Lighthizer, of Steubenville, and Dr. Carl S. Bickel, of Wheeling.

D. E. GREENELTCH, M. D.,
Secretary.

* * * *

MERCER

Joseph M. Sanders, attorney of Bluefield, was the guest speaker at the regular monthly dinner meeting of the Mercer County Medical Society, held at the Pinnacle Restaurant, on October 21. His subject was, "Medico-Legal Problems."

The Society went on record unanimously as being opposed to the proposed national insurance plan in connection with nonprofit medical and hospital insurance plans.

FRANK J. HOLROYD, M. D.,
Secretary.

* * * *

McDOWELL

Dr. S. G. Davidson, Roentgenologist at the Bluefield Sanitarium, was the guest speaker at the regular monthly meeting of the McDowell County Medical Society, held at Welch, November 10. His subject was "Silicosis," and the speaker presented an interesting series of x-ray films in connection with his address.

The following officers were elected for 1949: A. J. Villani, president; N. F. Coulon, vice president; Otis Linkous, Jr., secretary; and, R. E. Burger, treasurer.

D. CASTRODALE, M. D.,
Secretary.

WAR AND PEACE CASUALTIES

There were 19,000 amputations occurring among military personnel during World War II while during the same span of four years there were 120,000 amputations among the civilian population. Fifteen hundred men were blinded in the military service. During the same time 60,000 civilians lost their eyesight. Two hundred and sixty-five thousand were permanently disabled in the war effort, but 1,250,000 civilians were permanently disabled by disease and accidents during the same four years.—C. W. Goff, M. D., in Industrial Medicine.

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Woman's Auxiliary

CABELL

The revised copy of the constitution and by-laws of the Woman's Auxiliary to the Cabell County Medical Society was presented at the regular monthly meeting held October 12, at the Hotel Frederick, in Huntington. The revisions were prepared by a committee composed of Mrs. Gilbert Ratcliff, chairman, Mrs. W. O. Swann, and Mrs. James S. Klumpp.

It was ordered that a contribution be made to Morris Memorial Hospital, at Milton, in appreciation of the luncheon sponsored there for the members of the Woman's Auxiliary to the West Virginia State Medical Association during the annual meeting in Huntington, in May, 1948.

MRS. GATES J. WAYBURN,
Editorial Chairman.

* * * *

HARRISON

Mrs. L. D. Zinn, president of the Woman's Auxiliary to the Harrison County Medical Society, presided at the regular monthly dinner meeting held November 5 at the Waldo Hotel, in Clarksburg. The program for the evening was built on the theme "Looking Forward," and reports were submitted by chairmen of the various committees, and plans made for 1949.

The Auxiliary is sponsoring a series of twelve radio programs over radio station WBLK, Clarksburg. The programs are prepared by the American Medical Association, and the broadcasts are in charge of Mrs. Joseph Gilman.

MRS. JOHN T. GOCKE,
Publicity Chairman.

* * * *

KANAWHA

The members of the executive board of the Woman's Auxiliary to the West Virginia State Medical Association were guests at a luncheon meeting of Kanawha Medical Society, held October 15 at the Daniel Boone Hotel in Charleston.

Mrs. John W. Hash, president of Kanawha Auxiliary, presided as chairman at the luncheon.

A short address was delivered by Mrs. W. E. Hoffman, of Charleston, president of the State Auxiliary, and she introduced Dr. Thomas Bess, of Keyser, president of the West Virginia State Medical Association, who spoke briefly concerning the Association's proposed legislative program.

Mrs. Luther H. Kice, president of the Woman's Auxiliary to the American Medical Association, was introduced by Mrs. U. G. McClure, of Charleston, a

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Surgical Anatomy & Clinical Surgery, Two Weeks, Starting February 21, March 21.
Surgery of Colon & Rectum, One Week, Starting March 7, April 11.
Surgical Pathology Every Two Weeks.

GYNECOLOGY—Intensive Course, Two Weeks, Starting February 21, March 21.
Vaginal Approach to Pelvic Surgery, One Week, Starting February 14.

OBSTETRICS—Intensive Course, Two Weeks, Starting March 7.

MEDICINE—Intensive Course, Two Weeks, Starting April 4.
Personal Course in Gastroscopy, Two Weeks, Starting March 7.

PEDIATRICS—Intensive Course, Four Weeks, Starting April 4.

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member of the national executive board. Mrs. Kice discussed plans of the Auxiliary and praised the West Virginia chapter for the very fine work that is being done in this state.

Mr. Charles Lively, executive secretary of the West Virginia State Medical Association, discussed the proposed four-year school of medicine and dentistry, as well as plans for the complete reorganization of the state health department.

Mrs. Dana T. Moore, of Parkersburg, president elect of the State Auxiliary, was also an honor guest at the meeting, which was attended by nearly a hundred members and guests.

MRS. HUNTER BOGGS,
Corresponding Secretary,

* * * *

MARION

The Woman's Auxiliary to the Marion County Medical Society assisted in arrangements for a "Nutrition Day" program sponsored by the Tri-County Medical Society, the Upper Monongahela Dental Association, the West Virginia State Nutrition Committee, and the Marion County Health Association, which was held November 4 at the Fairmont Health Center and the Fairmont Hotel.

Doctors, dentists, technicians, educators, home economics instructors, and lay members of health committees from various parts of the state attended the all-day meeting. Dr. Joseph H. Barach, assistant professor of medicine at the University of Pittsburgh School of Medicine, was the guest speaker at the dinner. His subject was, "Nutrition in Diet and Disease."

MRS. C. M. RAMAGE,
Publicity Chairman.

* * * *

MERCER

A report on the meeting of the executive board of the State Auxiliary, held in Charleston, October 15, was submitted by Mrs. W. C. Slusher at the regular luncheon meeting of the Mercer County Medical Society held November 1 at the West Virginian Hotel in Bluefield.

Medical care in European countries was discussed most interestingly by Mrs. C. M. Scott, who recently returned from a visit overseas.

MRS. CECIL F. JOHNSTON,
Publicity Chairman.

* * * *

POTOMAC VALLEY

Dr. James H. Wolverton, Jr., of Piedmont, was the guest speaker at the regular monthly meeting of the Woman's Auxiliary to the Potomac Valley Medical Society, held October 13, at Burlington. He discussed various ways by which the auxiliary can be of service to the county medical society, as well as the community.

Mrs. Harry Coffman, the president, and Mrs. James H. Wolverton, Jr., the president elect, submitted reports concerning the annual fall meeting of the executive board of the Auxiliary, held October 15, in Charleston.

MRS. THAD HUFFMAN,
Publicity Chairman.

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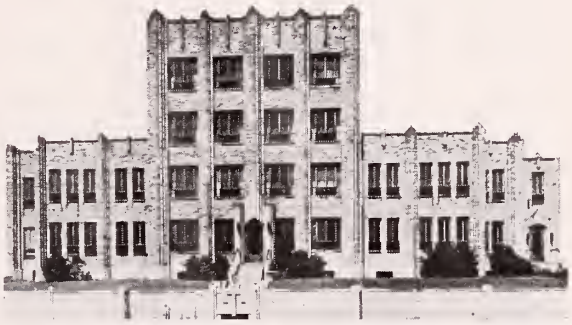

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A. KYLE BUSH, M. D.

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S. D. WU, M. D.

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Correspondence

BLUEFIELD SANITARIUM
Bluefield, W. Va.

November 4, 1948

Dr. Walter E. Vest, Editor
West Virginia Medical Journal
Huntington, West Virginia.

Dear Doctor Vest:

In view of the results of the election on November 2, I am sure that we will have to be on the alert during the next few years if we are to keep medicine as it should be. We may have some very serious problems confronting us.

We must use all available means to meet and if possible to defeat the undesirable features of the proposed compulsory National Health program. The National Physicians Committee is doing a good job trying to combat this pernicious type of legislation. Another organization, the Association of American Physicians and Surgeons, which has received the endorsement of the House of Delegates of the West Virginia State Medical Association, is also doing much to keep medicine free.

If the principles and objectives of the AAPS are followed, I believe that we will have the means of offering very powerful resistance. Membership in this organization, it seems to me, is imperative, since it gives strength as well as financial support to the objective.

As you know, Dr. C. J. Reynolds, of Bluefield, is chairman of the House of Delegates of the AAPS, and I hope that by bringing this matter to the attention of the membership by means of this letter addressed to you, doctors will not hesitate to write to Doctor Reynolds or other officials of the organization for further information concerning the work that lies ahead if we are to successfully combat bureaucratic medicine. Application blanks for membership in the AAPS will be sent by Doctor Reynolds promptly upon request.

Very sincerely yours,

W. H. St. Clair, M. D.

WHStC:ga

BETATRON FOR CANCER RESEARCH

The University of Illinois College of Medicine is to have the world's first installation of a betatron for cancer treatment and research. Although the cancer-fighting possibilities of the betatron were pointed out early by its inventor, Donald W. Kerst, of the University's Physics Department, such work was delayed during the war.

Research with the 20,000,000-volt instrument, which will be delivered in about 5 months, will be in charge of Roger A. Harvey, head of the College's Department of Radiology.—Science.

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E. P. WELLS ACCEPTS MAINE PH POST

Mr. Edmund P. Wells, who has served for several years as executive secretary of the West Virginia Tuberculosis and Health Association, has resigned to accept the office of executive secretary of the Maine Public Health Association, with headquarters at Augusta. His resignation is effective January 15, 1949.

Mr. Wells came to West Virginia from Massachusetts in April, 1940, and has always been actively interested and engaged in administrative work pertaining to the affairs of the Association. His resignation was announced at a meeting of officers held in Clarksburg the middle of November.

Dr. George F. Evans, of Clarksburg, was appointed chairman of a committee to select a successor to Mr. Wells, who will assume his new duties with the Maine Association on Feb. 1.

AUXILIARY MEMBERS HONORED

Mrs. U. G. McClure, of Charleston, was elected second vice president of the Woman's Auxiliary to the Southern Medical Association at the annual meeting held in Miami, October 25-28. She has served for the past year as a member of the executive board of the A. M. A. Auxiliary. She is a past president of both the Kanawha Auxiliary and the State Auxiliary.

At the Miami meeting, Mrs. V. Eugene Holcombe, of Charleston, was named chairman of the committee on "doctor's day" activities.

STATE C. OF C. OPPOSES SOCIALIZED MEDICINE

The West Virginia Chamber of Commerce, in annual session at White Sulphur Springs November 17-18, adopted a resolution opposing the establishment in this country, under the social security act, of any form of socialized medicine.

Ernest K. James, Charleston attorney, was elected president. He succeeds Lacy I. Rice, of Martinsburg.

TRAIN DISPATCHERS DON'T LIVE LONG

A lifetime friendship with a train dispatcher may be a short affair—about 15 years. The historic disturbing example of short lives in a trade is that of the buhrstone maker. Generations ago, and long before the day of the synthetic grinding wheel, natural gannister stone was carved into wanted shapes by workmen who started in near the age of 20 and were on the average dead at 35 from silicosis.

Few are aware that the train dispatcher who starts his duties at 35, after years of preparation as a telegrapher or tower operator, parts company with this troubled globe near the age of 50.1 years. Statistically that statement may not be sound. There are not enough train dispatchers and enough figures. It is no less factual that the average age at death for 440 train dispatchers, the highest acquirable from their benefit association records at the time of the investigation, was 50.1.—Carey P. McCord, M. D., in Industrial Medicine.

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PATIENTS ARE PEOPLE

Anyone ministering to the chronically ill, in whatever capacity, must train his eyes to look beyond the swollen joint, the failing heart, the ailing lung. He must acquire and develop sufficient acuity to detect the presence of that inner being whose pulsations so often become throbs, even in the crudest, and go unrecognized and unattended.—Paul Dufault, M. D., in NTA Bulletin.

STATE SUPPORT FOR MEDICAL EDUCATION

Medical education has become so expensive that medical schools and affiliated hospitals find private endowment and contributions no longer adequate. They are dependent on state and federal support. This support should be liberal and must be devoted exclusively for teaching and training students and care of the indigent if high standards are to be maintained. Taxes collected from all the people for the benefit of a few is prostituting our democratic form of government and emasculating many of the projects and institutions organized, intended and supported for the benefit and protection of all.

Anything short of the best teaching and training of our students to develop better future doctors would be denying the people that high quality of medical care to which they by their support are justly entitled.

Private donations, funds and grants can always be secured for medical research and special clinical and building projects. These may be more acute, more appealing and more spectacular. They are no more important than securing and holding permanently the best available teaching talent.

An energetic earnest campaign to interest private capital should be a continuing program for medical alumni.—Casper F. Hegner, M. D., in Rocky Mountain Med. J.

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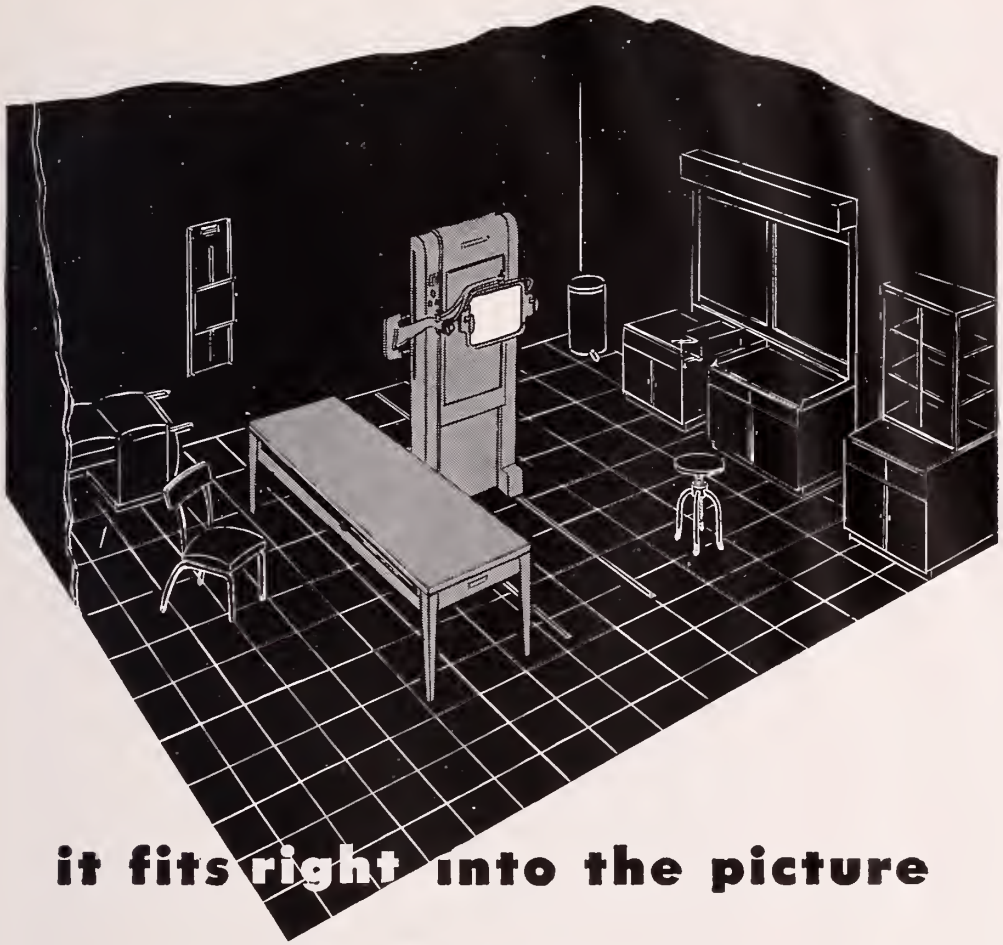

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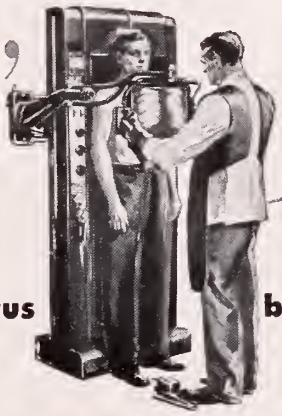

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By Emil Novak, M. D.

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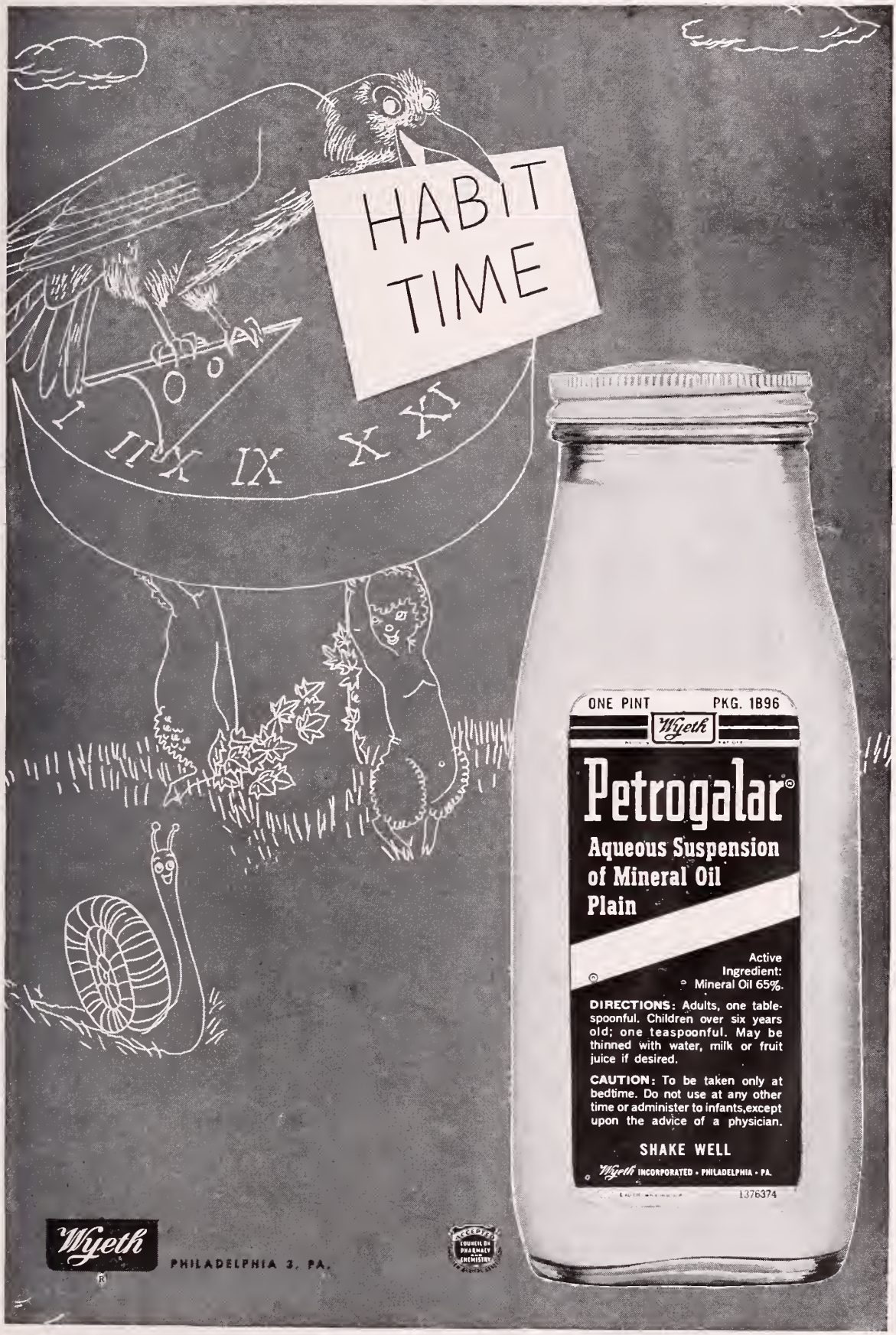
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SHOULD VITAMIN D BE GIVEN ONLY TO INFANTS?

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But now a careful histologic study has been made which reveals a startlingly high incidence of rickets in children 2 to 14 years old. Follis, Jackson, Eliot, and Park* report that postmortem examination of 230 children of this age group showed the total prevalence of rickets to be 46.5%.

Rachitic changes were present as late as the fourteenth year, and the incidence was higher among children dying from acute disease than in those dying of chronic disease.

The authors conclude, "We doubt if slight degrees of rickets, such as we found in many of our children, interfere with health and development, but our studies as a whole afford reason to prolong administration of vitamin D to the age limit of our study, the fourteenth year, and especially indicate the necessity to suspect and to take the necessary measures to guard against rickets in sick children."

*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, Am. J. Dis. Child. 66:1-11, July 1943.

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